CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS.
New York, May 25, 1905.

CONTENTS.

CONSTRUCTION NEWS:
Plans and Specifications on File.......193
List of Contracts Pending.......193
Railways.......194
Electric Railways.......194
Light and Power Plants.......195
Bridges.......195
Buildings.......196
Water Supply and Irrigation.......196
Sewerage.......197
Garbage Disposal.......198
Streets and Roads.......198
Manufacturing Plants.......198
Miscellaneous Contracts.......199
Foreign Contracts.......200
Contract Prices.......200
READERS' WANTS.......200
CIVIL SERVICE EXAMINATIONS.......201
INDUSTRIAL NOTES.......201
TRADE PUBLICATIONS.......203
PROPOSALS.......204

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
June				
•1	Irrigation canals	Glendive, Mont.	P & S	4- 6
•1	Telephone system	Glendive, Mont.	S	5- 4
•1	Conduit work	Boston, Mass.	S	5-18
•2	Water-works	Bristol, Vt.	P. & S	5-18
3	Dredging	Norfolk, Va.	S	5-25
5	Sidewalks, granolithic	Grenada, Miss.	S	5-18
•6	Water tunnel	Toronto, Ont.	P. & S	5- 4
10	Court-house	Plaquemine, La.	P & S	5- 4
12	Pipe, well	Whittier, Cal.	S	5-18
•12	Electric power	Winnipeg, Man.	B. S	5-18
•15	Irrigation work	Hazen, Nev.	S	5- 4
•15	Pathfinder dam	Denver, Colo.	P & S	5- 4
•15	Irrigation canals	Boise, Idaho	P & S	4-27
•15	Telephone line	Boise, Idaho	S	4-27
24	Reservoir (Cuba)	Washington, D. C.	S	5-18
•28	Irrigation canals	Billings, Mont.	P & S	5- 4
Aug.				
26	Coaling plant	Philippines	S	5- 4
Sept.				
1	Steel manufacture	New S. Wales	S	3-23

•Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

May 31. Heating, plant, etc., Washington, D. C. ..May 4
Advertised, Eng. News, May 4 to 25.
May 31. Electric wiring, New York, N. Y. ....May 25
June 1. Lighting plans, Mufreesboro, Tenn. ....May 18
June 5. Vapor lamps, Wichita, Kan. ....May 25
June 6. Street lighting, Shelbyville, Tenn. ....May 11
June 6. City lighting, N. Tonawanda, N. Y. ....May 18
June 8. Gas supply, Newport, Ky. ....Apr. 27
June 8. Electric plant, Alma, Neb. ....May 25
June 8. Lighting, Wilmington, N. C. ....May 25
June 10. Heating, power plant, etc., Wash., D. C. ..May 25
Advertised, Eng. News, May 25 and June 1.

BRIDGES.

May 26. Bridge, Reading, Pa. ....May 18
Advertised, Eng. News, May 18.
May 26. Bridges, Tacoma, Wash. ....May 11
May 29. Viaduct, Cleveland, O. ....May 25
May 31. Bridges, Moncton, N. B. ....May 25
June 1. Bridge, Crysler, Ont. ....May 25
June 1. Abutments, Mansfield, O. ....May 25
June 1. Viaduct, Knoxville, Tenn. ....May 25
June 1. Bridge, iron, Waterford, Pa. ....May 25
June 1. Bridges, steel, Springfield, Mo. ....Apr. 20
June 1. Bridge approaches, Crookston, Minn. ...May 18
June 1. Bridge, Indianapolis, Ind. ....May 18
June 1. Bridge, iron, Lima, O. ....May 18
June 3. Bridge, Mifflintown, Pa. ....May 18
June 5. Arches, Wilkesbarre, Pa. ....May 18
June 5. Bridge, Rutland, Vt. ....May 18
Advertised, Engineering News, May 18.
June 5. Bridges, Plymouth, Ind. ....May 18
June 5. Bridge, steel, Bloomfield, Ind ....May 25
June 5. Bridge, steel, Lancaster, Pa. ....May 25
June 5. Bridge, steel, Fulton, Miss. ....May 25
June 5. Bridge, Versailles, Ind. ....May 25
June 6. Bridge, steel, Mitchell, Ont. ....May 25
June 6. Bridges, Fargo, N. Dak. ....May 25
June 6. Bridge, steel, Perth, Ont. ....May 18
June 6. Bridges, Ft. Smith, Ark. ....May 18
June 6. Bridge, Marion, O. ....May 18
June 6. Bridge, Dayton, O. ....May 11
Advertised, Eng. News, May 11 to June 8.
June 7. Bridges, steel, Iola, Kan. ....May 25
June 7. Bridge, Lafayette, Ind. ....May 25
June 10. Bridges, Rockville, Ind. ....May 25

BUILDINGS.

May 26. Wiring, Kankakee, Ill. ....May 4
May 26. Heating plant, Indianapolis, Ind. ....May 11
May 26. School, Tipton, Ind. ....May 11
May 27. Buildings, Vancouver Barracks, Wash. ..May 4
Advertised, Eng. News, May 4 to 25.
May 27. Printing plant (Mfg. Plts.), Topeka, Kan. May 11
May 27. School, Isanti, Minn. ....May 18
May 27. Hospital, Ft. Sheridan, Ill. ....May 18
Advertised, Eng. News, May 18 and 25.
May 29. Schools, New York, N. Y. ....May 11
May 29. Court-house and jail, Norman, Okla. ...May 4
May 29. Heating apparatus, Kankakee, Ill. ....May 4
May 30. Bath-house, Cleveland, O. ....May 25
May 31. Court-house, Savannah, Tenn. ....May 25
May 31. Post-office, Allentown, Pa. ....Apr. 27
Advertised, Eng. News, Apr. 27 and May 4.
May 31. Court-house, repair, Baltimore, Md. ......May 11
Advertised, Eng. News, May 11 to June 1.
May 31. Light-house, etc., Philadelphia, Pa. ......May 11
May 31. Buildings, Shiprock, N. Mex. ....May 11
May 31. School, Lima, N. Y. ....May 18
May 31. Buildings, Delaware City, Del. ....May 18
Advertised, Eng. News, May 18.
May 31. Court-house, Darlington, Wis. ....May 18
May 31. Heating plant, etc., Washington, D. C. ..May 18
June 1. Bank building, Knoxville, Tenn. ....May 11
June 1. Post-office, Little Falls, N. Y. ....May 4
June 1. Cold storage plant (mfg. pl.), Hamilton, O. May 25
June 1. Hotel, Hot Springs, Ark. ....May 18
June 1. Library, Watertown, S. Dak. ....May 18
June 1. Buildings, Pine Ridge, S. Dak. ....May 18
June 2. Church, St. Paul, Minn. ....May 18
June 2. Building, Washington, Ind. ....May 11
June 2. Buildings, Tulalip, Wash. ....May 11
June 2. Hospital, Nevada, Mo. ....May 25
June 3. Building, Indianapolis, Ind. ....May 25
June 3. Brick and cement, Washington, D. C. ....May 25
June 5. Jail, Belmont, Nev. ....May 25
June 5. Post-office, Crawfordsville, Ind. ....May 4
Advertised, Eng. News, May 4 and 11.
June 5. Post-office, Craufordsville, Pa. ....May 18
June 6. Factory (mfg. pl.), Chicago, Ill. ....May 18
June 6. Post-office, Rockhill, S. C. ....Apr. 27
Advertised, Eng. News, Apr. 27 and May 4.
June 7. Post-office, Reno, Nev. ....May 11
June 7. Buildings, Washington, D. C. ....May 11
Advertised, Eng. News, May 11 to June 8.
June 8. Post-office, Amesbury, Mass. ....May 11
June 8. Library, Union, N. J. ....May 18
June 8. Buildings, Ft. Totten, N. Y. ....May 18
Advertised, Eng. News, May 18 to June 8.
June 8. Blacksmith shop (Mfg. Plants), Ft. Riley, Kan. ....May 25
June 9. Pumping machinery, Newport News, Va. ..May 25
June 10. Court-house, Plaquemine, La. ....May 4
Advertised, Eng. News, May 4.

WATER SUPPLY AND IRRIGATION.

May 27. Steam pumps, pipe, etc., Wash., D. C. ..May 4
Advertised, Eng. News, May 4 to June 1.
May 27. Water mains, road, Portland, Me. ....May 18
May 27. Boilers, Brantford, Ont. ....May 18
May 29. Pumping engine, Woonsocket, R. I. .....May 18
Advertised, Eng. News, May 18 and 25.
May 29. Water-works, sewers, Strathcona, Alta. ..May 11
May 30. Pipe laying, New Market, N. H. ....May 18
May 31. Reservoir, New York, N. Y. ....May 18
June 1. Irrigation canals, etc., Glendive, Mont. ...Apr. 6
Advertised, Eng. News, Apr. 6 to May 18.
June 2. Engines and boilers, Cincinnati, O. ......May 4
June 2. Water-works, Bristol, Vt. ....May 18
Advertised, Eng. News, May 18 and 25.
June 5. Laguna dam, Los Angeles, Cal. ....May 4
Advertised, Eng. News, May 4 to 25.
June 5. Standpipe, Montgomery, Ala. ....May 18
Advertised, Eng. News, May 18 and 25.
June 5. Pipe and meters, Winnipeg, Man. ....May 25
Advertised, Eng. News, May 25 and June 1.
June 5. Well work, St. Paul, Minn. ....May 25
June 5. Laying mains, Lakewood, O ....May 25
June 6. Water-works improvements, Crestline, O. ..May 25
June 5. Pumping engine, Wilmington, Del. ....May 25
Advertised, Eng. News, May 25.
June 5. Water-works, Nashwauk, Minn. ....May 25
June 5. Water-works, Belding, Mich. ....May 25
June 6. Pipe and laying, etc., Northfield, Vt. .....May 18
Advertised, Eng. News, May 18.
June 6. Water tunnel, etc., Toronto, Ont. ....May 4
Advertised, Eng. News, May 4 to 25.
June 7. Water-works, Vineland, N. J. ....May 25
Advertised, Eng. News, May 25 to June 22.
June 7. Stop cocks, castings, New York, N. Y. ..May 25
June 8. Reservoir, Soldiers' Home, Cal. ....May 25
June 8. Irrigation system, Riverside, Cal. ....May 25
June 10. Irrigation canal, Montpelier, Idaho. .....May 25
Advertised, Eng. News, May 25.

SEWERAGE.

May 27. Sewer, Lake City, Minn. ....May 25
May 29. Sewerage system, Boston, Mass. ....May 25
May 29. Sewers, Cincinnati, O. ....May 11
May 29. Sewer and septic tank, Pipestone, Minn. ..May 11
May 29. Sewers, etc., Strathcona, Alta. ....May 18
May 30. Sewers, Des Moines, Ia. ....May 25
May 31. Sewers, Buffalo, N. Y. ....May 25
May 31. Sanitary sewer, Columbus, O. ....May 25
May 31. Sewers, Brooklyn, N. Y. ....May 25
May 31. Sewers, New York, N. Y. ....May 25
May 31. Sewers, Merrill, Wis. ....May 18
May 31. Sewerage system, Washington, D. C. ...May 18
May 31. Sewer, Pine Bluff, Ark. ....May 18
June 1. Sewers, Darlington, S. C. ....May 11
Advertised, Eng. News, May 11 and 18.
June 1. Sewer, Cincinnati, O. ....May 25
June 1. Sewers, Erie, Pa. ....May 25
Advertised, Eng. News, May 25.
June 1. Sewer, Tell City, Ind. ....May 25
June 1. Sewers, Mansfield, O. ....May 25
June 5. Sewers, Stevens Point, Wis. ....May 25
June 5. Sewers, Pasadena, Cal. ....May 25
June 5. Sewers, Lakewood, O. ....May 25
June 5. Sewerage, Plainfield, N. J. ....May 11
June 5. Sewerage disposal, Plainfield, N. J. .....May 18
Advertised, Eng. News, May 18 and 25.
June 5. Sewer, Webb City, Mo. ....May 18
June 6. Sewers, Maryville, Mo. ....May 25
June 6. Sewer, Sonora, Cal. ....May 25
June 6. Sewers, Rockford, Ill. ....May 25
Advertised, Eng. News, May 25.
June 7. Sewers, Susquehanna, Pa. ....May 25
June 9. Sewers, Meridian, Miss. ....May 25
June 9. Drain pipe, Cincinnati, O. ....May 18

STREETS AND ROADS.

May 26. Sidewalks, Arnprior, Ont. ....May 11
May 27. Roads and walks, Oswego, N. Y. ....May 4
Advertised, Eng. News, May 4 to June 1.
May 29. Paving, asphalt, Cincinnati, O. ....May 11
May 29. Grading, graveling, West Carrollton, O. ..May 18
May 30. Macadam, Cleveland, O. ....May 25
May 30. Sidewalks, cement, Shelbyville, Ind. ......May 25
May 31. Graveling, Dayton, O. ....May 25
May 31. Granolithic sidewalks, Lucknow, Ont. ...May 25
May 31. Paving and curbing, Washington, D. C. ..May 11
May 31. Grading, etc., San Francisco, Cal. ....May 11
June 1. Paving, brick, Fremont, O. ....Mar. 16
June 1. Paving and curbing, Hutchinson, Kan. ...May 18
June 1. Paving, etc., Mansfield, O. ....May 18
June 1. Road, Oxford, N. Y. ....May 18
Advertised, Eng. News, May 18.
June 1. Stone pike, Findlay, O. ....May 18
June 1. Paving, asphalt, Tacoma, Wash. ....May 11
June 1. Paving, asphalt, Columbus, O. ....May 25
June 1. Paving, Elmira, N. Y. ....May 25
June 1. Cement sidewalks, Lindsay, Ont. ....May 25
June 1. Turnpike, Danville, Ky. ....May 25
June 1. Sidewalks, cement, New York, N. Y. .....May 25
June 1. Roads and walks, Ft. Caswell, N. C. .....May 25
June 2. Paving and curbing, Traverse City, Mich. May 25
June 2. Crushed stone and gravel, Cincinnati, O. ..May 11
June 3. Paving, asphalt, Ann Arbor, Mich. ......May 25
Advertised, Eng. News, May 25.
June 5. Macadam, Kansas City, Kan. ....May 25
June 5. Grading and graveling, Rockville, Ind. ...May 25
June 5. Cement walks, Walla Walla, Wash. ......May 25
June 5. Roads, Bloomfield, Ind. ....May 25
June 5. Paving, etc., Emporia, Kan. ....May 25
June 5. Pike road, Bedford, Ind. ....May 25
June 5. Roads, Winamac, Ind. ....May 25
June 5. Road, gravel, Rockport, Ind. ....May 25
June 5. Paving, Gloversville, N. Y. ....May 25
Advertised, Eng. News, May 25.
June 5. Paving, asphalt, Cincinnati, O. ....May 11
June 5. Sidewalks, granolithic, Grenada, Miss. ...May 18
June 5. Paving, bitulithic, Cincinnati, O. ....May 18
June 5. Cement sidewalks, Antigo, Wis. ....May 18
June 6. Paving, vitrified brick, Waterbury, Conn. ..May 11
June 6. Roads, Bloomfield, Ind. ....May ..
June 6. Paving, Amsterdam, N. Y. ....May 25
Advertised, Eng. News, May 25.
June 6. Gravel road, Brownsville, Ind. ....May 25
June 7. Sidewalks, etc., East Cleveland, O. ......May 18
June 7. Road, Flemington, N. J. ....May 18
June 8. Paving, brick, Cincinnati, O. ....May 25
June 10. Asphalt blocks, etc., Washington, D. C. ..May 25
Advertised, Eng. News, May 25 and June 1.
June 10. Cement sidewalks, Wyoming, O. ....May 25

MISCELLANEOUS CONTRACTS.

May 26. Dredging, Buffalo, N. Y. ....Apr. 27
Advertised, Eng. News, Apr. 27 to May 25.
May 26. Piles, New York, N. Y. ....May 25
May 27. Lock, Pittsburg, Pa. ....May 4
Advertised, Eng. News, May 4 to 25.
May 29. Stone superstructure, Buffalo, N. Y. ...May 4
Advertised, Eng. News, May 4 to June 1.
May 29. Dredging, Portland, Me. ....May 4
Advertised, Eng. News, May 4 to June 1.
May 29. Lock gates, etc., Nashville, Tenn. ....May 4
Advertised, Eng. News, May 4 to June 1.
May 29. Lamp-shop, Tompkinsville, N. Y. ....May 4
Advertised, Eng. News, May 4 and 11.
May 29. Breakwater, Rondeau, Ont. ....May 11
May 29. Approach, etc., New Orleans, La. ....May 11
May 29. Landing pier, Peel Head Bay, Que. .....May 11
May 29. Excavation, etc., Boston, Mass. ....May 18
May 29. Garbage removal, Bradley Beach, N. J. .May 18
May 29. Garbage boats, New Orleans, La. ....May 25
May 29. Ferry structures, etc, New York, N. Y. ..May 25
May 30. Levee work, New Orleans, La. ....May 25
May 30. Dredge work, Dover, Ont. ....May 18
May 30. Steel shed, New Orleans, La. ....May 11
Advertised, Eng. News, May 11 and 18.
May 31. Dump carts, wagons, etc., Wash., D. C. ..May 11
May 30. Refuse destructor, etc., New South Wales. Apr. 27
May 31. Dikes, Cincinnati, O. ....May 4
May 31. Dredge, Galveston, Tex. ....May 4
Advertised, Eng. News, May 4 to June 1.
May 31. Dredging, Mobile, Ala. ....May 4
Advertised, Eng. News, May 4 to June 1.
May 31. Light-house, Philadelphia, Pa. ....May 4
Advertised, Eng. News, May 4 and 11.
May 31. Book stacks, Washington, D. C. ....May 18
Advertised, Eng. News, May 18 and 25.
May 31. Levee work, Vicksburg, Miss. ....May 18
Advertised, Eng. News, May 18 and 25.
May 31. Iron, spikes, etc., Columbus, O. ....May 18
Advertised, Eng. News, May 18.
May 31. Boilers, Chicago, Ill. ....May 25
June 1. Portland cement, Mansfield, O. ....May 25
June 1. Telephone system, Glendive, Mont. ......May 4
Advertised, Eng. News, May 4 to June 1.
July 1. Street Railway, Chicago, Ill. ....Apr. 13
Advertised, Eng. News, Apr. 13 to May 11.
June 1. Conduit work, Boston, Mass. ....May 18
Advertised, Eng. News, May 18 and 25.
June 2. Excavation, Grand Rapids, Mich. ....May 4
Advertised, Eng. News, May 4 to 25.
June 2. Portland cement, New York, N. Y. ......May 25
June 3. Dredging, Norfolk, Va. ....May 25
June 3. Dredging, Norfolk, Va. ....May 18
June 5. Timber, Nashville, Tenn. ....May 4
Advertised, Eng. News, May 4 to June 1.
June 5. Pier work, Duluth, Minn. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 5. Dredging, Cleveland, O. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 5. Dredging, Wilmington, Del. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 5. Rubbish conveyor, New York, N. Y. .....May 25
June 5. Breakwaters, Port Stanley, Ont. ....May 25
June 5. Wharf addition, Governor's Island, N. Y. ..May 25
June 6. Machine tools, Washington, D. C. ......May 11
June 6. Nuts, spikes, etc., Washington, D. C. ...May 11
June 6. Excavation, Buffalo, N. Y. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 8. Jetty work, Cleveland, O. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 8. Protection dikes, Savannah, Ga. ....May 11
Advertised, Eng. News, May 11 to June 15.
June 8. Boiler, Fennimore, Wis. ....May 25
June 9. Wharf extension, New Carlisle, Que. .....May 25
June 10. Dredging, Wilmington, Del. ....May 18
Advertised, Eng. News, May 18 to June 15.
June 10. Cement, Little Rock, Ark. ....May 18
June 10. Iron work, Little Rock, Ark. ....May 18
June 10. Traveling crane, Norfolk, Va. ....May 18
June 12. Dredging, Boston, Mass. ....May 18
Advertised, Eng. News, May 18 to June 15.
June 12. Dredging, Geneseo, Ill. ....May 11
Advertised, Eng. News, May 11 to June 1.
June 12. Terrace wall, Holyoke, Mass. ....May 25
Advertised, Eng. News, May 25 and June 1.
June 13. Ice Pier, Cincinnati, O. ....May 18
June 14. Rubblestone, Boston, Mass. ....May 18
Advertised, Eng. News, May 18 to June 15.
June 15. Wreck Removal, Jacksonville, Fla. ......May 18
Advertised, Eng. News, May 18 to June 15.
June 15. Excavation work, Washington, D. C. ....May 18
Advertised, Eng. News, May 18 to June 15.
June 15. Steel trestles, etc., Louisville, Ky. ......May 18
Advertised, Eng. News, May 18 to June 15.
June 15. Telephone line, Boise, Idaho. ....Apr. 27
Advertised, Eng. News, Apr. 27 to June 8.
June 15. Wharf, roadway, etc., Hawaii. ....May 4
June 15. Dredging, Mobile, Ala. ....May 25
Advertised, Eng. News, May 25 to June 15.
June 19. Dredging, Norfolk, Va. ....May 25
Advertised, Eng. News, May 25 and June 1.
June 19. Dredging, Wilmington, Del. ....May 25
Advertised, Eng. News, May 25 to June 22.
June 19. Breakwater, Cleveland, O. ....May 25
Advertised, Eng. News, May 25 to June 22.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

AVON BEACH & SOUTHERN.—It is reported that the motive power of the railway to be built from Beach Park to South Lorain, O., known as the Avon Beach & Southern, will be steam. Right-of-way is being secured through Sheffield and Avon townships.

BONNERVILLE SOUTHWESTERN.—J. F. Hinckley, Ch. Engr. of St. Louis & San Francisco R. R., states that this new line, incorporation of which was noted on May 18, will extend from Bonnerville to Jelks, Ark., 55 miles. The road is constructed for 32 miles and five miles additional are now under construction.

BUFFALO, ROCHESTER & PITTSBURG.—We are informed that proposed double-tracking at Bradford, Pa., will be done by company's forces. J. M. Floesch, Rochester, N. Y., Ch. Engr. Noted on April 6.

BREMEN & SOUTHWESTERN.—Citizens of Bowden, Ga., and other towns have raised funds necessary to build this railroad from Bremen to Bowden. Fully noted on May 18.

CHICAGO, MILWAUKEE & ST. PAUL.—JOHN MARSCH, of Iron Mountain, Mich., has contract to build a spur line between the Tobin and Dunn mines at Crystal Falls, Mich. A. J. Earling, Pres. of the Chicago, Milwaukee & St. Paul Railroad, has announced at Mitchell, S. Dak. that "this system positively would construct a line to the Pacific coast, for which all financial arrangements have been made," according to the Boston "Herald."

COLUMBUS NORTHERN.—A charter has been granted to this company in Georgia. It will be built from Columbus, Ga., through the counties of Muscogee, Harris, Meriwether and Troup, either to West Point or LaGrange, a distance of about 60 miles. The capital stock of the company is $100,000. The incorporators are O. C. Bullock, T. W. Bates, Arthur Bussey, L. F. Humber, E. P. Owsley, Rhodes Browne, T. E. Blanchard, S. B. Hatcher and Ralph O. Howard, all of Columbus. It is said this new line will be built to be operated in connection with the Atlanta, Birmingham and Atlantic, which is to run from Brunswick, Ga., and from Atlanta to Birmingham, Ala. We are advised by Charles L. Davis, of Warm Springs, Ga., an incorporator, that plans will be adopted soon.

CHICAGO, ROCK ISLAND & PACIFIC.—A cut-off, from Brighton to Perlee, Ia., eight miles, may be constructed this summer.

COLUMBUS & LAKE MICHIGAN.—C. T. Hobart, Ch. Engr., Lima, O., informs us that line is all surveyed from Columbus for 355 miles. The railroad will run through Lima, Defiance, West Unity, O.; Coldwater, Kalamazoo, Allegan and Saugatuck, Mich. Right-of-way is nearly all secured. No contracts are to be let except station work on line. George A. Garretson, Cleveland, O., is Pres.

CULVER & PORT CLINTON.—Company is reported to have been incorporated in Ohio to build a railroad from Gypsum to East Toledo, with a branch from point in Harris township, Wood county, to Bowling Green. Capital stock, $10,000. Incorporators, G. A. Esch, Mart Brennan, J. McNaught, O. M. Knode and O. B. English.

COLORADO & SOUTHERN.—The directors, it is said, have decided to incorporate this company in another state than Colorado and ask the stockholders to authorize a $100,000,000 bond issue at their meeting in Denver on June 15. Of the $100,000,000 in bonds, $37,000,000 is for the purpose of refunding underlying bonds and $17,000,000 is intended for taking over the Fort Worth & Denver City Railway, buying the Trinity and Brazos Valley Railway and building 165 miles of new road to Houston, Tex. Among other acquisitions contemplated is the Colorado Springs & Cripple Creek Railway. It is understood also that the road's shops at Denver will be removed to another state. Noted on May 11. J. M. Herbert, Denver, is Gen. Mgr. and Vice-Pres.

COLORADO SOUTHERN, NEW ORLEANS & PACIFIC.—This company has been incorporated in New Orleans, La., with $5,000,000 capital, to construct a railroad from New Orleans or from a near-by point to the Pacific coast via Texas. Capital is said to be secured. The first Board of Directors are Frank B. Hayne, John J. Gannon, Sylvester P. Walmsley, C. C. Cordill, Solomon Wexler and H. Generes Dufour.

DULUTH, VIRGINIA & RAINY LAKE.—M. A. Murphy, Supt., Virginia, Minn., informs us that nothing is being done toward proposed extension to Koochiching and Baudette, 60 miles, pending arrangements affecting ownership of this property. A news report from Ironwood, Mich., states that W. H. Cook and associates will take over the extensive timber and railroad holdings of the Rainy Lake Co. and that a new corporation has been organized to succeed the old concern. The name selected is the Virginia & Rainy Lake Company. The capitalization is $2,000,000. The Rainy Lake Company is the holding company of the various corporations: Virginia Lumber Co., Minnesota Construction Co. and the Duluth, Virginia & Rainy Lake Railroad. The officers are: President, William O'Brien, of St. Paul; Vice-Pres., W. H. Cook, of Duluth; Secy., Granville G. Stone, of Wausau; Treas., Flower D. Stone, of Wausau. The officers, together with R. E. Parcher, of Wausau, are the board of directors.

EDMUNDS & EASTERN.—Geo. O. Smith, Frank M. Stanley, C. A. Mangusson, H. J. Hughes and Geo. B. Cole, of Olympia, Wash., have incorporated this railroad to build from point on the sound near Edmunds, Snohomish county, to Monroe and thence to eastern borders of the state via Spokane. Branch from Monroe, 60 miles south, through Snoqualmie valley is proposed.

HALIFAX & SOUTHWESTERN.—This railway will be completed this year. Company now operates 195 miles of line; 80 miles remain to be built. J. Brignell, Bridgewater, N. S., is Supt. This company is controlled by the Mackenzie and Mann interests, of Toronto, Ont.

ILLINOIS CENTRAL.—A new line may be built by the I. C. from point near Graysville, Ill., through Gibson county, Ind., passing through Owensville, Princeton and Petersburg, to connect with the Indianapolis Southern Ry. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

KANSAS CITY SOUTHERN.—New extensions will be built, including one to New Orleans, according to Herman Sielcken, Vice-Pres., 195 Broadway, New York. A. F. Rust, Kansas City, Mo., is Engr.

KINSTON NORTHERN & BRIGHTON.—A report from Cape Charles, Va., states that surveys will be run for a route between Cape Charles and Kiptopeake.

LAKE ERIE & PITTSBURG.—It is stated that important changes in the proposed route of the extension from Lorain to Pittsburg are to be made to lessen grades. The management of the road recently stopped construction work at certain points, and this led to the belief that the project had been abandoned. This is denied by W. B. Thompson, Lorain, O., attorney for the company.

LONG ISLAND R R.—Construction has been begun on improvements in Brooklyn, N. Y., which will cost $7,000,000. These will include the rebuilding of the Bay Ridge and Manhattan Beach lines of the Long Island Railroad, the elevation and depression of all tracks along these lines and the abolition of all grade crossings. The topography of the railroad will be completely changed for 13 miles.

LIBERTY-WHITE R. R.—W. M. White, Gen. Mgr., McComb City, Miss., writes us that report of the purchase of this railroad by Capt. J. T. Jones is incorrect. He states that "the Liberty-White Railroad has not been sold to any one. To the contrary, they are operating their line to Liberty, Miss., and in addition have recently gotten amendment to charter to allow them to build to Columbia, in Marion county. About 12 miles of this eastern extension is now under construction."

MISSOURI, OKLAHOMA & GULF.—It is said that an extension will be built northward from Texas state line to Kansas City, Mo., and southward to Fort Worth, Tex. J. W. HOFFMAN & CO., Henryetta, Ind. T., are now building an extension from Joplin, Mo., to the Texan state line. W. P. Dewar, Kansas City, Mo., is Vice-Pres. and Gen. Mgr.

NORTHERN CENTRAL.—J. H. Nichol, Engr., Williamsport, informs us that contracts are let and under way on proposed improvements which were voted on April 20.

NEW YORK, NEW HAVEN & HARTFORD.—The proposed extension of the New England Railroad from Needham to West Roxbury, Mass., will begin soon. The state railroad commission will first give its approval of the route and the method of construction.

NEW ORLEANS & GREAT NORTHERN.—This company has been organized in New Orleans, La., with large capital to build a railway from New Orleans to Memphis. The incorporators are: Frank H. Goodyear and C. H. Goodyear, of Buffalo, N. Y.; Martin E. Olmstead, of Harrisburg, Pa.; Charles I. Jones, of Baltimore, Md.; I. C. Enochs, of Jackson, Miss. Charter is sought in Mississippi. Capital is $25,000,000.

ORANGE & NORTHWESTERN.—President L. Miller, Orange, Tex., has announced that contracts will be let and construction begun at once on extension to Newton.

PENSACOLA, ALABAMA & WESTERN.—The preliminary survey from Pensacola to Memphis, 400 miles, has been completed, we are advised. Most of the right-of-way has been secured. Estimates of the cost of a first-class road are now being prepared. The survey of a number of branch lines has been begun. J. I. Miller, Selma, Ala., is Ch. Engr. William H. Knowles, Pensacola, Fla., is Pres.

PENSACOLA NORTHEASTERN.—Charter has been applied for for authority to build from Pensacola, Fla., to Alabama state line. The directors of the Pensacola & Northeastern Railroad will be F. C. Brent, Pres.; C. M. Covington, Vice-Pres.; C. W. Lamar, Secy. and Treas., and J. A. Chaffin and J. C. Avery, all of Pensacola, Fla.

PITTSBURG, BINGHAMTON & EASTERN.—E. H. Gay & Co., of Boston, will finance this railroad, it is announced. George E. Green, of Binghamton, is one of the promoters. The line will extend from Binghamton to Ansonia, Pa., 143 miles. Fred. C. Keighley, Uniontown, Pa., Engr., has reported upon coal fields on proposed route.

RED BLUFF & FALL RIVER.—It is reported, according to San Francisco "Call," that this company has been incorporated to build a railroad through Manton and Shingletown, Cal. Incorporators are O. K. King, D. E. Miles and associates. Forty miles of right-of-way are reported obtained.

SAVANNAH RIVER RAILROAD.—This company has applied for a charter in Georgia to build a railroad from Augusta via Bath, Waynesboro and Sylvania to Clyo, 85 miles. Capital stock, $100,000. Incorporators: Fred. Lockhart, J. H. Flythe, John T. McClusky, J. B. Tutt, W. E. McCoy, C. B. Young, W. C. Wardlaw, D. Shaver, W. H. T. Walker, J. R. Slaton, W. W. Battey, Lamar C. Toomer, James P. Richards, Charles Warren Davis, of Augusta, Ga., and R. C. Neely. F. B. Hall, John A. Blount, N. P. Thomas, R. N. Berrien, Jr., W. M. Fulcher, J. F. McElmurray, Jr., Simeon Bell, C. W. Skinner, Ed. Brinson, Sidney C. Jones, H. B. McMaster, W. A. Wilkins, Jr., and W. W. Johnston, of Waynesboro, Ga. Principal office, Augusta, Ga.

SOUTHERN DEVELOPMENT CO.—William A. Otis, J. M. Parker, Clarence T. Titus, of the firm of Wm. A. Otis & Co.; Eugene A. Snuderlin and Representative F. L. Sherwin, of the law firm of Hall, Babbitt & Thayer; E. G. Hammock and others, of Colorado Springs, Colo., have incorporated this company "for the construction and maintenance of railroad, telephone and telegraph lines, electric light plants, water-works, tramway systems and other utilities and for the development of lead, iron, coal, placer gold, silver and copper mines." The company is capitalized at $200,000.

SOUTHERN.—C. H. Ackert, Fourth Vice-Pres., Washington, D. C., has announced that great improvements are to be made in Chattanooga, especially in enlarging shops and terminal facilities.

ST. LOUIS & NORTHWESTERN.—I. K. Pearson, Engr., Cleveland, O., is interested in plan to build this railroad. It was projected and surveyed several years ago. The original survey ran from Mokane, Mo., to Brookfield.

TENNESSEE & ATLANTIC.—A charter has been granted to the Tennessee and Atlantic Railway Co., of Roane county, with $50,000 capital. Incorporators are: E. C. Myers, S. P. Sparks, H. M. Carr, R. M. Jones and George L. Burke. The company proposes to construct a railway from Harriman, Tenn., through Roane county to some point on the line between Tennessee and Georgia, between Blue Springs and Blue Mountain.

TOLUCA, MARQUETTE & SOUTHERN.—Incorporated in Illinois with a capital of $700,000 to build a railroad from Toluca, in Marshall county, Ill., in a southerly direction through the counties of Marshall, Woodford, McLean, Dewitt, Macon, Christian, Shelby, Montgomery, Fayette, Marion, Jefferson, Franklin, Williamson, Union and Pulaski to Thebes, where connection will be made with the Gould lines, the Frisco and the Illinois Central systems. Branches are to run from Woodford county through Tazewell county to Pekin, thence north to East Peoria and on to Henry; thence west to the Mississippi River; another branch will run through McLean, Livingston, Ford and Iriquois counties; another through Sangamon, Morgan, Cass, Brown, Pike and Adams to Quincy; another through Marion, Clinton, Madison and St. Claire to East St. Louis; another through Pulaski county to Cairo. The distance is about 300 miles. The incorporators and first board of directors include: William W. Twist, Henry Duggan, James Mannix, of Toluca; William H. Horine, of Chicago, and Charles J. Devlin, of Spring Valley. The offices of the company will be located at Toluca.

TIDEWATER RY.—SANDS & OLIVER, of Roanoke, Va., have been awarded contract for first 100 miles of line westward from Norfolk, Va. W. N. Page is Pres., Ansted, W. Va.; Raymond Du Puy, Norfolk, Va., is Gen. Mgr., in charge of construction.

WHITE SULPHUR SPRINGS.—We are informed that this railway will be a standard-gage line, 15 miles long. It is to run from Van Buren, Ark., to Uniontown and White Sulphur Springs. R. P. Allen, of Van Buren, is Pres. J. L. Rea is Secy. Survey has been run, but right-of-way is not yet fully obtained. Joseph Hansen, of St. Joseph, Mo., is principal promoter. Contracts may not be let until next fall. This company was recently incorporated.

WASHINGTON, IDAHO & MONTANA.—F. H. Thatcher, Pres., Winona, Minn., states that this company, of which notice of incorporation was made last week, will build a railroad from Palouse, Wash., via Princeton, Idaho, to Elk River, Idaho, a distance of 75 miles, of which three miles are in Washington and 72 miles in Idaho. Contracts for building 42 miles of the line from the Palouse end have been let to WREN & GREENOUGH, of Spokane, Wash. Grading is to begin at once. F. E. Weyerhaeuser is Vice-President, St. Paul, Minn.; F. S. Bell, Treas., Winona, Minn.; C. R. Musser, Secy., Muscatine, Ia. J. J. Hughes, Palouse, Wash., is Ch. Engr. Headquarters of company is at Palouse.

WHITE SULPHUR SPRINGS RY.—Walter J. Hansen, St. Joseph, Mo., an incorporator, writes us that this railway will be 15 miles long, extending from Van Buren to Uniontown, Ark. Motive power may be steam or electricity, as both are authorized by charter. This line was surveyed several years ago and original route will be used. Right-of-way is being secured. Engineer has not been appointed. Capital for construction is assumed but no contracts are let. The railway will open up a fine country and also a health resort. Connection will be made at Van Buren with the St. Louis, Iron Mountain & Southern Ry. and the Frisco system. R. P. Allen, of Van Buren, is Pres.

WABASH-PITTSBURG TERMINAL. — JAMES D. CORCORAN & CO., of Pittsburg, Pa., have been awarded contract for connecting branches to United States Steel Corporation mills in Pittsburg district; also for placing track on West Side Belt Line grade and the St. Clair Terminal road at Clairton, Pa. J. W. Patterson, Pittsburg, is Ch. Engr.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

LEOMINSTER, MASS.—J. G. WHITE & CO., INC., 49 Exchange Pl., New York, have contracts for building the extension of the Worcester Consolidated St. Ry. from Leominster to Worcester via Sterling and Boylston, we are informed. Frederick A. Huntress, Worcester, Mass., is Gen. Mgr. of Consolidated Co.

SPRINGFIELD, MASS.—The Springfield Street Ry. Co. has accepted the Bircham Bend franchise. The new line will be built, in accordance with provisions of the franchise as amended by Springfield and Chicopee aldermen, from Indian Orchard to Chicopee. G. W. Cook is Supt., 1 Main St.

GLEN COVE, N. Y.—The Glen Cove Railroad Co., which was granted a franchise by the Nassau County Supervisors on Sept. 18, 1903, to build a trolley line in Glen Cove village, and which was granted an extension of time on June 28, 1904, was accorded a further extension of time to Jan. 2, 1906, on May 15, in accordance with a request made by the company.

WAVERLY, N. Y.—The State Railroad Commission has given a hearing on application of the Chemung Valley Traction Co. to build an electric railroad from Elmira to Waverly and to Sayre[illegible] Theodore R. Tuthill, of Binghamton, [illegible] representing company.

MOHAWK, N. Y.—B[illegible] of Trustees of this village on May 31 [illegible] hear application of the Utica & Mohawk [illegible] Ry. Co. for permission to build a d[illegible] track extension in Mohawk. Edwin R. [illegible] is Clk. Bd. Trustees. C. Loomis A[illegible] Utica, is Gen. Mgr. of company.

RED BANK, N. J.—Th[illegible] Monmouth County Electric Co. will extend [illegible] electric railroad tracks to Oceanic. Wi[illegible] F. Hogan, 643 Tenth St., Brooklyn, N. Y[illegible] Pres. and Gen. Mgr.

BANGOR, PA.—Wm. M[illegible] & Co., Harrison Bldg., Philadelphia, [illegible] have completed plans for a 15-m[illegible] electric railway for the Northampton & [illegible] St. Ry. Co. Power plant will be ere[illegible]

CATAWISSA, PA.—We [illegible] informed that a survey was begun on M[illegible] for the Catawissa & Numidia Street [illegible] line between this place and Numidia. [illegible] G. Yetter is Engr. Chas. E. Randall [illegible] Treasurer, W. M. Vastine; Secretary, [illegible] E. Kreisher; Solicitor, W. H. Rhawn.

NORTHUMBERLAND, P[illegible] Engineers will begin a survey at once [illegible] here and East Lewisburg for an exte[illegible] of the Lewisburg, Milton & Watsontown [illegible] Passenger Ry. Right-of-way has been acq[illegible] Louis H. Mountney, Milton, Pa., is S[illegible]

WASHINGTON, D. C.—The United States Realty Co. has awarded cont[illegible] to E. SAXTON for construction of trolley line on property owned by this compa[illegible] at Congress Heights. C. W. Zieber is M[illegible] of the company at Philadelphia.

FREDERICK, MD.—James H. Ingram, Jr., is interested in plan to build [illegible] electric line from this place to Baltimore. It is to be completed by September 5.

STAUNTON, VA.—A charter has been granted to the Virginia Valley Traction Co. H. B. Sproul is Pres.; J. F. C[illegible]mmer, Vice-Pres.; and H. G. McGary, Secy. The capital stock is $25,000. The object of the company is to operate a steam or electric railway.

CHARLOTTE COURT HOUSE, VA.—The Appomattox & Charlotte Railway Co., of Charlotte Court House, has been incorporated by B. P. Eggleston, of Drakes Branch; S. L. Ferguson, of West Appomattox; to construct, operate and maintain a railway from Appomattox to Drakes Branch, Va. The capital stock is $5,000. Motive power is not specified. Mr. Eggleston is Pres.

FAIRMONT, W. VA.—The Fairmont & Clarksburg Trac. Co. will build an extension to Bellview "addition" this year. Arthur L. Linn is Gen. Mgr.

ATLANTA, GA.—Application has been made by Charles J. Canfield, of Chicago, Ill.; George W. Swigart, of Manistee, Mich.; Thomas B. Felder, Jr., of Atlanta, Ga.; J. Albert Johnson, of Greenwood, Ind.; Wm. F. Wocher, of Indianapolis, Ind.; Grafton Johnson, of Greenwood, Ind.; James B. Nelson, of Greencastle, Ind.; W. H. Turnbull, of Manistee, Mich.; C. C. Young, of Manistee, Mich.; George W. Williamson, of Atlanta, Ga., for a charter for the Atlanta-Macon Interurban Ry. Co., which will build an electric railway between these cities. THE ATLANTA CONSTRUCTION & DEVELOPMENT CO. will undertake the general construction of the railway.

SELMA, ALA.—Funds have been raised, it is reported, for the proposed electric railroad to be built between Selma and Marion. G. L. Waller is Chn. of Subscription Committee for Selma.

HATTIESBURG, MISS.—The Hattiesburg Traction, Light & Power Co., with $250,000 capital, will soon begin construction of street railway lines. Six miles will be built at first. H. L. McKee, Meridian, is Gen. Mgr. Noted on April 27.

ALEXANDRIA, LA.—The Board of Aldermen has granted a franchise for 25 years to J. G. Bush, of Mobile, Ala., to construct and operate an electric street car line in this city. The ordinance provides that work shall be commenced within four months, and that not less than three miles of track shall be completed in twelve months. Noted on May 11.

GALLATIN, TENN.—Charles A. Whiteside, of the Gallatin Milling Co., has been elected president of permanent organization which is interested in project to build an electric road to Cumberland River. L. B. Payne, of Payne Elevator Co., is Vice-Pres.; Treasurer, H. C. Rutledge, Rutledge Grocery Co.; Secretary, E. O. Buchanan, spoke and hub division, American Vehicle Woodstock Association.

NASHVILLE, TENN.—W. J. Cummins, Watkins Crockett, W. C. Dibrell, H. G. Hill, W. K. Phillips, George S. Parkes, J. H. Bruce and W. P. Ready, of the Arcade, have incorporated the Nashville, Crocker Springs and Ridge Top Ry. A line is to be built to Crocker Springs, but definite route has not been surveyed.

CHATTANOOGA, TENN.—The proposed Tennessee-Alabama Interurban Railroad Co., which was recently incorporated under the laws of the state of Georgia, with an authorized capital stock of $300,000, will enter Chickamauga and Chattanooga National Military Park and Fort Oglethorpe, Ga. S. W. Divine, the promoter of the new railroad company, has been granted the right by the secretary of war to build a railroad through the government reservation. The incorporators of the company are: S. W. Divine, of Chattanooga; J. H. Walker, Jr., J. C. Bryan, J. R. Jones, W. E. Biggen, J. M. Robinson, W. E. Bryan, and J. W. Clark, of Catoosa county, Ga. The new line will run through Ringgold, Catoosa Springs and Ducktown, Ga.

DANVILLE, KY.—Survey has been made for the Creelsboro & Danville Electric railway line between this city and Creelsboro, Tenn. J. A. Quisenberry, of Danville, is interested.

LEXINGTON, KY.—DOLAN BROS., of Lexington, have been awarded contract by the Central Kentucky Traction Co. for building the road between this city and Versailles

STEUBENVILLE, O.—T. J. STRINGER, of Steubenville, has been awarded the contract for building the Steubenville, Follansbee & Wellsburg Ry., which will connect Steubenville and Wellsburg, W. Va.

HAMILTON, O.—It is reported that the Cincinnati, Dayton & Toledo Traction Co. will abandon certain lines in this city and build several new ones. C. A. Hamilton is Supt.

LAGRO, IND.—The Ft. Wayne & Wabash Valley Traction Co. has awarded a contract to J. R. FORESTEL, of Peru, Ind., to straighten the curves and build an overhead crossing at Lagro. The improvements will require 1..,000 yards of gravel.

TULSA, IND. T.—O. T. Boyle, Pres. and Gen. Mgr. of the Arkansas Valley Interurban Railway, now in course of construction southeast from Wichita, Kan., has written E. T. Tucker, Secy. of the Tulsa Manufacturers' Association, that it is the intention of the builders of the road to extend the line south from Kansas into the Tulsa coal fields, providing the citizens of Tulsa will purchase the right-of-way from Bartlesville.

DES MOINES, IA.—C. A. Park, of Chicago, is securing funds necessary to build an electric railway to Creston via Winterset.

The Peterson Heat, Light & Water Co., of Des Moines, which recently purchased a heating and lighting plant, are reported to be considering plans for the construction of an electric interurban line from Iowa Falls to Alden, a distance of seven miles.

MINNEAPOLIS, MINN.—Contracts for grading extension of Minneapolis & St. Paul Suburban Ry. Co. to Fort Snelling has been awarded to THOMAS KEOGH, of St. Paul. Noted on May 11.

OMAHA, NEB.—The Omaha & Council Bluffs Ry. & Bridge Co. will build an extension from its present southern terminal at South Omaha to Bellevue and Fort Crook. Surveys are completed. F. A. Tucker is Gen. Supt.

The Omaha, Lincoln & Beatrice Ry Co. intends building between Lincoln and Springfield. Surveys have been run for several routes. The line will pass through Louisville and Murdock.

KANSAS CITY, MO.—William R. Byers, a Locating Engr., has surveyed route for an electric railway to Leavenworth, 21 miles. A continuation of this line to St. Joseph is under consideration. News reports state that the Metropolitan Street Ry. Co. is interested in the project. Charles N. Black is Gen. Mgr. of Metropolitan Co.

AUSTIN, TEX.—C. W. Ohrendorf, of St. Louis, Mo., who is promoting an interurban electric railway between Austin and Lockhart, has conferred with members of the Citizens' Committee regarding proposition to raise a bonus for the proposed railway. If line is built to Austin the citizens must secure right-of-way for the company and terminal grounds and subscribe for $20,000 worth of stock. On payment of the first $5,000 the syndicate will deposit in an Austin bank a sum of money sufficient to construct the line, estimated to cost about $500,000 fully equipped. The cost of the road proper will be about $350,000.

DALLAS, TEX.—An electric railroad will be built from the city to West Dallas. The promoters are T. Duncan, D. F. Lofton and W. R. Stovall.

BRYAN, TEX.—A. W. Wilkerson, Treas. of the Bryan-College Electric Ry. Right-of-Way Co., informs us that survey for a railway, 4½ miles long, from Bryan to Agricultural & Mechanical College, has been made by A. & M. College engineering class. Maps, profiles and estimates have been prepared. All right-of-way secured. Company desires a capitalist to construct and operate the electric line and power and light plants in Bryan on a cash bonus proposition. Company has franchise for furnishing power and lights and right-of-way over all streets. N. H. Brown, College Station, is Pres.

CORSICANA, TEX.—J. V. Watkins, Corsicana, writes us that only preliminary survey has been made for proposed electric railway, 32 miles long, through Mildred and Eureka to Fairfield, Tex. Capital is being negotiated. Company, at organization, will have authorized capital of $400,000 or $500,000, partly subscribed by local capitalists. Three small bridges will be built and some trestle work. Contracts have not been let.

CHEYENNE, WYO.—Board of Trade is considering plans for building a street railway line. Motive power would be either gasolene or electricity.

EVERETT, WASH.—The Rapid Railway Co. will build trolley line between Bellingham and Everett. Work will commence in a year; line to be completed in three years. Company was recently incorporated, with $2,000,000 capital, by C. J. Taylor, of Everett; W. M. Ross and Theo. Anderson and Dr. J. E. Stauffer.

SIERRAVILLE, CAL.—D. C. Berry and others are to incorporate the Sierra Valley Light & Power Co. The company will build an electric freight and passenger railway in the Sierra valley.

REDDING, CAL.—It is planned in Redding to build an electric road from Redding to Kennet. The Northern California Power Co. is to finance and construct the road, and the business men of Redding are to subscribe $30,000 of stock.

COLUSA, CAL.—W. H. Buster has been granted a franchise to build a railroad in Colusa county. Motive power will be electricity or compressed air.

SAN DIEGO, CAL.—An application has been made by D. C. Collier, Jr., for a franchise for a street railway through the eastern part of University Heights. Motive power is to be electricity, from overhead system, or electro-gasolene motors.

LOS ANGELES, CAL.—The Pacific Electric Ry. Co. will probably build a four-track line to Dominguez. A. D. Schindler is Gen. Mgr.

RIALTO, CAL.—An electric line probably will be built in Rialto. Kenneth McRae is interested.

OAKLAND, CAL.—The Traction Transportation Co. has been incorporated with capital of $75,000. Principal place of business is to be in this city. The directors are W. C. Reveal, of Berkeley; Jay W. Blaine, W. S. Peters and W. H. Chickering, of Oakland, and H. C. Brougher, of Tonopah. The object of the company is to conduct a freight and passenger business.

HOLLISTER, CAL.—An application for an electric railway franchise has been made before the Board of Supervisors by W. W. Gibson, of San Francisco, an attorney representing J. C. Kemp Van Ee. It is for part of a system running through San Benito County, from Hollister through San Juan to Chittenden and to Watsonville. Franchise will be sold to highest bidder on June 24.

KINGSTON, ONT.—Municipal ownership of street railway system has been voted for. J. M. Campbell, of Kingston, the City Engineer and another expert will estimate value of present plant.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

BAR HARBOR, ME.—J. A. Leonard, Engr., Bar Harbor & Union River Power Co., Bar Harbor, is reported to be making surveys in Ellsworth for the 60-ft. dam which the company proposes to build on Union River. The construction of the dam together with storage reservoirs along the river will involve the expenditure of $1,000,000. It is stated that the contract may be let to Holbrook, Cabot & Rollins, Boston, Mass.

JOHNSON, VT.—J. A. Pearl, E. H. Sherwin, C. N. Farrington and C. H. Stearns are a committee in charge of installation of an electric plant for village.

FRAMINGHAM, MASS.—Town has voted to consider purchase of a plant, or construction of one, to manufacture and distribute gas.

NIAGARA FALLS, N. Y.—Buffalo and Niagara Falls Electric Light & Power Co. has increased its capital stock from $500,000 to $2,500,000.

NEW YORK, N. Y.—Bids are asked until May 31, 3 p. m., for completing electrical wiring system in Criminal Court Building, Manhattan Boro. John F. Ahearn, Boro. Pres.

LONG ISLAND CITY, N. Y.—A final transfer has been made to the city of New York of 120 lots at Long Island City and the sum of $200,000 paid over for the site for one of the largest municipal lighting plants in the country. City will build a public dock at this point. The new plant in Long Island City will be used for supplying electricity to Brooklyn and Queens Boroughs. The Manhattan Borough plant will be on Ave. A.

MIDDLEBURG, PA.—George W. Wagenseller, Secy., Middlecreek Elec. Co., writes us that bids are now asked until June 15 for the water power electric plant noted last week. Plans and specifications are delayed. W. K. Darlington, Real Estate Trust Bldg., Philadelphia, is Engr.

PHILADELPHIA, PA.—Two bids were received by Council on May 18 for lease of city gas works. In general the propositions were similar. The United Gas Improvement Co., the present lessee, offered the city $25,000,000 for a lease of 75 years. E. B. Smith & Co., 7 Wall St., New York, made the same offer, with $20,000,000 additional to reimburse the United Gas Improvement Co. for money expended by that corporation in improvements. Under the terms of the existing lease held by the United Gas Improvement Co. the city may secure control of the works in 1907 by the payment to the company of the money expended in improvements, amounting to about $20,000,000. Smith & Co.'s bid differed from the other in that it proposed to share profits with the city at the rate of one-third for ten years and one-half for 65 years, and under this offer the city may reduce the price of gas as the profits increase. The proposal of the United Gas Co. was accepted.

WASHINGTON, D. C.—Following bids were received May 20 by Lt.-Col. Smith S. Leach, Engrs., for installing complete electric light plant for Washington filtration plant: Edmund Saxton, Washington, D. C., Class C, $11,000. Brennan Construction Co., Washington, D. C., Class C, $7,544. Malcolm W. Hill & Co., Baltimore, Md., Class A, $57,990; Class B, $6,750; Class C, $13,906; Class D, $37,923. J. F. Buchanan & Co., Philadelphia, Pa., Class A, $56,400; Class B, $4,600; Class C, $8,500; Class D, $44,600. B. F. Sturtevant Co., Hyde Park, Mass., Class B, $7,377. Johnston Livingston, Jr., & Co., New York, N. Y., Class A, $61,275; Class B, $6,848; Class D, $36,444. McCay Engineering Co., Baltimore, Md., Class A, $53,987; Class B, $6,089; Class C, $11,549; Class D, $37,912. Westinghouse Elec. Mfg. Co., Baltimore, Md., Class B, $6,024. E. S. Marlow, Washington, D. C., Class C, $12,606. National Elec. Supply Co., Washington, D. C., Class A, $51,449; Class B, $6,698; Class C, $12,455; Class D, $32,299. Thomas W. Powef, Wasnington, D. C., Class B, $6,069.

WASHINGTON, D. C.—Bids are asked by District Commissioners until June 10 for constructing and installing heating, lighting, power plant and water supply for Industrial Home School, at Blue Plains, D. C. (Advertised, Engineering News.)

WHEELING, W. VA.—The Home Electric Co. has been chartered to conduct a general electrical construction business. Capital stock, $10,000. Incorporators: J. M. McCurdy, of Elm Grove; J. F. McCurdy, R. V. McCay and W. P. Keyser, of Wheeling.

CLARKSBURG, W. VA.—The Hutton Gas Co. has been chartered with a capital of $10,000. Incorporators: M. J. Francis, of Wilsonburg; Lynn S. Hornor, Ernest Hutton, Melvin G. Sperry and Clarence B. Sperry, of Clarksburg.

WILSON, N. C.—L. S. Randolph, Consult. Engr., Blacksburg, Va., has been retained by this city to prepare plans, specifications and estimates for a gas power plant and the electrical distribution of the same.

WILMINGTON, N. C.—Bids will be received until June 8 by A. M. Waddell, Mayor, for lighting the city with gas and electricity.

PELHAM, GA.—W. H. Maury, of the Pelham Electric Light Co., will receive bids at once for an electric light plant, to cost $12,000. Noted on May 11.

LAFOLLETTE, TENN.—The LaFolette Water, Light & Telephone Co. has been chartered to conduct a general business in these lines. Capital stock, $150,000. Incorporators: Nelson C. Hubbard, John P. Achenz, Hermon L. Achenz, Septer W. Douglas and Frank C. Cox, all of Wheeling, W. Va.

NASHVILLE, TENN.—Plans are being prepaper by Ford Bacon & Davis, Engrs., 24 Broad St., New York, for an addition to the power plant of the Nashville Railway & Light Co. E. Beazley is Purchasing Agent for company.

NASHVILLE, TENN.—Albert Akers has purchased the franchise of the Nashville Steam Heating Co., which several years ago was granted a general conduit franchise. This expires on June 12, 1905.

CHATTANOOGA, TENN.—The application of C. E. James and J. C. Guild to erect an electric power plant on the Tennessee River at a cost of $3,000,000 was received by Council and ordinances passed granting the proposed lock and dam company a franchise to extend its wires over all portions of this city, granting the extension of a 21-year franchise for a period of 104 years and releasing the corporation from all municipal taxes for the first five years after the completion of the plant.

COLUMBIA, S. C.—Columbia Electric Street Railway, Light & Power Co., E. F. Lilly, Ch. Engr., according to reports, is to purchase Columbia Water Co., and intends to erect $300,000 auxiliary steam plant for emergency use.

FORT VALLEY, GA.—Bonds for electric light plant have been sold by this town. It is planned to have plant in operation by August 15.

FREMONT, O.—The Fremont Light & Power Co. will develop the water power on the Sandusky River near Fremont. Company has retained H. Von Schon, of Detroit, Mich., as Consulting Engr.

KENTON, O.—Kerlin Brothers have purchased the local plant of the Kenton Gas & Electric Co. for $128,000. The new owners will spend $40,000 on the plant, it is said, either building a new artificial gas plant or constructing a natural gas pipe line from the Lagan fields.

FOREST, O.—A. A. Holbrook, vice-Pres. of the C. A. Dielhenn Co., of Cleveland, has submitted estimates on cost of an electric light plant for this town. A plant to cost about $7,500 will be erected if $5,000 of stock is bought by local capitalists. The plan is said to meet with favor.

LEBANON, O.—The Ohio Fuel & Supply Co. has been granted a franchise to use city streets for purpose of laying mains to furnish natural gas.

CINCINNATI, O.—We are informed that contract for power piping and heating plant for Longview Hospital has been let to McGOVERN CO., Cincinnati; contract for boilers was let to AULTMAN & TAYLOR CO., Mansfield, O. Bids were received May 11 by Dr. F. W. Harmon, Supt. Hospital.

PENTWATER, MICH.—We are informed that plans are about completed for proposed water power installation of Oceana Electric Light & Power Co., near Wiley, Mich. The estimated cost of the work is $50,000, and it will require one pair 400-HP. water wheels, 350 r. p. m., with direct connected generator, one pair 300-HP. water wheels, 400 r. p. m., with generator, two 25-HP. exciters, 650 r. p. m., 24 miles transmission line, three-phase, 25,000 volts, two sets transformers, switchboards, etc. B. C. Lindley, Pentwater, is Pres., and Harry J. McDargh, Dayton, O., is Consult. Engr. Mentioned May 4.

ROTHSAY, MINN.—This town, according to a correspondent, is about to install a lighting plant. G. M. Coevie may be able to give information.

MUNCIE, IND.—Jerome Herf, of Peru, Ind., has submitted proposition to Board of Works for lighting city streets. Matter is under consideration.

MORRIS, ILL.—It is announced that the Illinois Steel Co. will erect a $1,000,000 power plant near Morris; 15,000 HP. will be developed. Part of this horsepower is for operation of company's Joliet, Ill., plant.

SIOUX CITY, IA.—The Sioux City Gas & Electric Co. will make improvements this year which will cost $100,000. There will be laid six miles of gas mains to Leeds. L. L. Kellogg is Gen. Mgr.

OXFORD, IA.—The City Council has advertised for bids for a complete gasoline gas plant which is to be operated by the city. It is estimated that the plant will cost $5,000.

HASTINGS, NEB.—City has arranged with ALLIS-CHALMERS CO., of Milwaukee, for equipping an electric lighting plant.

YORK, NEB.—Council has granted a franchise to John D. Brooder, of Kane, Pa., and Philip J. Hass, of Omaha, for a gas plant.

WISNER, NEB.—City has voted $9,000 of bonds for a municipal lighting plant.

ALMA, NEB.—We are informed that bids are asked until June 8 for furnishing material and constructing an electric light plant and water-works system, consisting of approximately: one 10-in. tubular well; power house machinery setting, etc.; two 60-in. × 14 ft. return flue tubular boilers and one 150-HP. heater; one 60-HP. high speed engine; a 40-KW. D. C. dynamo and fixtures; poles, wire, lamps, etc.; one simple, duplex steam fire pump, a boiler feed pump and a deep well power pump; about 1½ miles of water pipe with hydrants, valves, etc.; one standpipe or elevated steel tank and tower; also gas producer plant. M. A. Earl, 1416 First Natl. Bank Bldg., Chicago, Ill., is Consulting Engr.

WICHITA, KAN.—Bids are asked until noon, June 5, for furnishing to city 200 vapor street lamps, equipped with Welsbach burners. J. L. Leland, Cy. Clk.

EL PASO, TEX.—Pass City Electric Light Co. has been incorporated, with $8,000 capital stock, by W. H. Groudever, F. E. Gates and George Harper.

SAN ANTONIO, TEX.—An electric lighting plant will be built at Fort Sam Houston.

WASHTUCNA, WASH.—Mayor C. T. Booth writes us that this town will not install central plant for lighting with acetylene gas until fall.

HOOD RIVER, ORE.—W. Ross Winans, who is developing a town site near Hood River Falls, will build a series of dams by which 50,000 HP. may be developed at that point for transmission to nearby cities and towns.

PORTLAND, ORE. — THE STANLEY ELECTRIC CO., of Pittsfield, Mass., has contract for transformers and switchboards for the Oregon Water Power Co., of Portland.

RENO, NEV.—P. L. Flanagan, Pres. of the Reno Power, Light & Water Co., has asked the council for permission to build a new gas plant inside the city limits. The complete plant will cost $75,000, the building alone costing $50,000. He also asked permission to construct woolen mill in Reno, to cost $100,000. Both structures are to be completed this year.

WINNIPEG, MAN.—Proposals for supply of electric power and water power locations are on file at office of Engineering News. New York. Bids are asked until June 12, as advertised in Engineering News. See May 18.

CHILLIWACK, B. C.—Capital is being secured for construction of plant for the Chilliwack Light & Power Co.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

LENOX, MASS.—Henry L. Norton, Engr., Springfield, Mass., writes us that the NEW JERSEY BRIDGE CO., Fuller Bldg., New York, was awarded contract May 20 for building bridge at Lenoxdale, for $3,237.

SAYBROOK, CONN.—It is reported that the New York New Haven & Hartford R. R. Co. have awarded contract for constructing substructure of drawbridge to be built over Connecticut River to DALY & HOLBROOK, of Mount Kisco, N. Y. C. M. Ingersoll, Jr., is Ch. Engr., New Haven.

HARRISBURG, PA.—The Philadelphia & Reading Railway has begun the extension of its yards at Rutherford Station. The work will cost more than $1,000,000. The company will build a bridge over the river creek to carry 24 tracks. Wm. Hunter is Ch. Engr., Philadelphia.

WATERFORD, PA.—Bids are asked by A. J. Yaple, Comr., Waterford, until June 1, for construction of an iron bridge, about 420 ft. long, with abutments over Four-mile Creek.

LANCASTER, PA.—Bids are asked by County Commissioners until June 5 for constructing steel bridge over Octoraro Creek. M. G. Schaefer, County Compt.

PITTSBURG, PA.—Willis Whited, Asst. Engr., Dept. Pub. Wks., Bureau of Construction, writes us that contract for construction of bridge at Lincoln Ave. has been awarded to FRIDAY & CO., Fitzsimmons Bldg., Pittsburg, Pa. The successful bidder offered to do the work complete as shown on plans for $129,158. Itemized bids will be given under Contract Prices. The structure is to consist of two stone arch spans of 130 ft. each, 50 ft. wide, with high retaining wall approaches at one end and at the other end the abutments of an existing bridge belonging to the Penn. R. R. answer the purpose of wing walls. The total height is about 65 ft.

CHARLESTON, W. VA.—City will vote May 22 on the issuance of $60,000 of bonds for the construction of bridge or bridges across Elk River at Charleston. W. A. Hogue is Cy. Engr.

GOLDSBORO, N. C.—Atlantic & North Carolina Railroad has let contract to AMERICAN BRIDGE CO., of New York, for building steel bridges across Neuse and Newport Rivers between Goldsboro and Morehead City, and to COLVIN & DAVIDSON, Asheville, N. C., for masonry and stone work on said bridges. The Neuse-river bridge has three spans of 125 ft. and will cost $40,000; the Newport-river bridge is 60 ft. long and will cost $7,000.

CARTERSVILLE, GA.—Bids are asked by County Commissioners until June 15 for constructing bridge over Etowah River, near Kingston. L. P. Gaines, Chn., Cave, Ga.

BESSEMER, ALA.—Bessemer Electric Street Ry. Co. has about completed arrangements for the erection of proposed steel viaduct over Tenth Ave., to be 600 ft. long with approaches 600 ft.

ELLISVILLE, MISS.—The Board of Supervisors will issue $20,000 in bonds for construction of roads and bridges.

FULTON, MISS.—Bids will be received by Board of Supervisors until June 5 for construction of steel bridge of Tom Bigby River near Fulton. D. R. McDougal, Clk.

KNOXVILLE, TENN.—We are informed that bids will be received until June 1 by the Louisville & Nashville R. R. Co. for construction of viaduct over Clinch Ave. of steel concrete construction with approaches. Cost, $80,000. Edwin Thatcher, of the Concrete Steel Engineering Co., Park Row Bldg., New York, prepared the plans. Bids will be by invitation only. W. H. Courtenay, Ch. Engr., Louisville, Ky.

LOUISVILLE, KY.—Bids are asked until June 15 for constructing steel trestles, etc., for boulevard dam. Capt. H. Burgess, U. S. Engrs.

MANSFIELD, O.—Bids are asked by Board Public Service until June 1 for constructing stone and concrete masonry abutments to bridge, culvert, etc.

CLEVELAND, O.—Bids are asked by Board Public Service until May 29 for widening Superior St. viaduct. A. R. Callow, Secy.

VERSAILLES, IND.—Bids are asked by County Commissioners until June 5 for construction of double arch stone bridge over Graham Creek in Shelby Township. Nicholas Volz, County Audr.

BLOOMFIELD, IND.—Bids will be received by County Commissioners until June 5 for construction of a 60-ft. steel beam bridge across Baughman Pond in Washington Township. W. H. Deckard, County Audr.

DECATUR, IND.—This (Adams) county will soon advertise for bids for construction of about 12 concrete and iron bridges, from 12 to 20 ft. spans. D. Lewton, Co. Audr.

ROCKVILLE, IND.—Bids are asked by County Commissioners until June 10 for repairing and constructing cement arch and steel bridges throughout the county. Henry Grubb, County Audr.

LAFAYETTE, IND.—Bids are asked by County Commissioners until June 7 for construction of a 125-ft. span bridge, either of steel or concrete. G. H. Stevenson, County Surv.

GREEN BAY, WIS.—GREILING BROS., of Green Bay, have been awarded contract for construction of substructure for steel bridge to be erected across Fox River. Cost, $40,000.

COUNCIL BLUFFS, IA.—Bids are asked, L. Zurmuehlen, Jr., Cy. Clk., for construction of a bridge across Indian Creek on Merea Ave.

PARK RAPIDS, MINN.—We are informed that the HEWITT BRIDGE CO., of Minneapolis, was awarded contract May 15 for constructing a steel bridge, at $1,398. Chas. Foster, County Audr.

IOLA, KAN.—Bids are asked by County Commissioners until June 7 for construction of four steel bridges.

AINSWORTH, NEB.—Bids are asked by County Commissioners until June 15 for constructing a truss bridge over Niobrara River, to consist of six 36-ft. spans and a 12-ft. roadway. E. B. Smith, County Clk.

OLIVET, S. DAK.—J. A. Krane & Son, of Centerville, S. Dak., was the lowest bidder, at $2,790, for constructing eight steel bridges. Bids were opened May 8 by County Commissioners. J. W. Wipf, County Audr.

FARGO, N. DAK.—Bids will be received, Arthur G. Lewis, County Audr., until June 6 for constructing four bridges and for repairs to six bridges.

HILLSBORO, MO.—County Commissioner Hurtgen will let contract for three steel bridges on June 5.

KEYTESVILLE, MO.—County Bridge Commissioner has been ordered to let contracts for 18 steel bridges.

MARLIN, TEX.—A large number of wooden bridges of this county are to be replaced with iron structures. Action will be taken soon by Commissioners' Court. The County Judge can give information.

WEATHERFORD, TEX.—The Commissioners' Court has awarded contract to MITCHELL & PIGG, of this county, for construction of two bridges across Brazos River—one at the Bannon Crossing, the other at the McDonald Crossing, for $28,000.

MARLIN, TEX.—A number of wooden bridges of this county are to be replaced with iron structures. County Judge can inform.

ANDERSON, TEX.—Three county bridges which were washed away by recent floods are to be rebuilt. T. P. Buffington, County Judge, can give information.

TILLAMOOK, ORE.—Bids are asked by County Commissioners until July 5 for construction of bridge across Big Nestucca River. G. B. Lamb, County Clk.

PENDLETON, ORE.—It is stated that I. J. BAILEY, of Spokane, Wash., has been awarded contract for construction of two bridges across Walla Walla River above Milton, at $2,190, and $280 for stone approaches.

NAPA, CAL.—Bids will be received by Board of Supervisors until June 13 for construction of bridges in Road Districts Nos. 5 and 9.

REDDING, CAL.—Bids will be received by Board of Supervisors until July 6 for construction of a bridge across Eagle Creek at Ono.

MONCTON, N. B.—Tenders are asked by D. Pottinger, Gen. Mgr., Intercolonial Ry. Co., until May 31, for construction of substructure of a double track bridge to be erected near Bedford Station, N. S., and for substructures of two single track bridges—one to be erected near Mitchell Station, Que., and the other near St. Leonard Junction Station, Que. W. B. McKenzie, Ch. Engr., Moncton.

MITCHELL, ONT.—Tenders will be received by Wm. Davidson, County Clk., until June 6 for construction of a steel bridge across Thames River; also for construction of abutments, wing walls and approaches. John Roger, Engr., Mitchell.

CRYSLER, ONT.—Tenders will be received by J. A. Cockburn, Twp. Clk., until June 1 for construction of concrete piers and the building of approaches for bridge to cross Payne River. W. H. Magwood, Engr., Cornwall, Ont.

MINIOTA, MAN.—Tenders will be received until June 13 for constructing bridge across Assiniboine. Address W. Howard, Miniota.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

PORTSMOUTH, N. H.—C. L. FELLOWS & CO., of Concord, N. H., were awarded contract for new hospital building for New Hampshire State Hospital, at $111,366.

LOWELL, MASS.—It is stated that bids are being received by Board of Education for construction of new grammar school on Ennell St., for which $60,000 has been voted.

WILLIAMSTOWN, MASS.—It is announced that Williams College will soon erect a $150,000 dormitory. Rev. H. Hopkins is Pres.

PROVIDENCE, R. I.—Common Council has voted $150,000 for the enlarging and furnishing of the Technical Hugh School building.

WHITE PLAINS, N. Y.—Board of Supervisors at a recent meeting decided to build $150,000 addition to court-house.

NEW YORK, N. Y.—McKim, Mead & White, Archs., 160 Fifth Ave., are taking figures on a clubhouse for the Colony Club, to be located at 120 Madison Ave. Brick, 6 stories, 60 × 80 ft. Heating and ventilating system, gymnasium fixtures, pumps, etc. Cost, $200,000.

Maynicke & Franke, Archs., 298 Fifth Ave., are taking figures on a $200,000 alteration and addition to building at 894-900 Broadway, which consists of adding ten stories, 30 × 100 ft., in rear and adding four stories to present building, 100 × 100 ft. Boilers, engines, generators, pumps, etc.

Ernest Flagg, Arch., 35 Wall St., is taking figures on a clubhouse for the Automobile Club of America to be located at 247 West 54th St. Brick and stone, fireproof, 6 stories, 75 × 140 ft. Gasoline tanks, heating apparatus, steel stack, elevators, etc.

Robertson & Potter, Archs., 160 Fifth Ave., are taking figures on a loft building to be erected at Fourth Ave. and 12th St., for Hamilton Fish estate, 135 Broadway. Brick and stone, fireproof, 12 stories, 75 × 150 ft. Engines, generators, motors, boilers and heating system.

Albert E. Davis, Arch., 494 East 138th St., is taking figures on a training school for Lebanon Hospital located at Westchester and Caldwell Aves. Cost, $75,000.

Horgan & Slattery, Archs., 1 Madison Ave., are ready for bids on general contract for stables and offices to be erected on 24th and 25th Sts., for Fiss, Doerr & Carroll Horse Co., 147 East 24th St. Cost, $700,000.

Henry Bacon, Arch., 160 Fifth Ave., has been appointed architect for bank building to be erected at Union Square and 16th St., for the Union Square Savings Bank. Previously noted.

J. B. Snook & Son, Arch., 261 Broadway, are taking figures on a store and loft building, to be erected at 17th St. and Fifth Ave., for the estate of A. E. Hoffman, 4 Warren St. J. L. Mott Iron Works, 88 Beekman St., are the lessees. Brick and stone, fireproof, 12 stories, 60 × 125 ft. Engines, ventilating system, coal handling machinery and motors. Cost, $500,000.

Schickel & Ditmars, Archs., Fifth Ave. and 18th St., are taking figures on a loft building to be built at 114 West 17th St., for Domestic Realty Co., 6 West 22d St. Brick and steel, 6 stories, 75 × 100 ft. Boilers, motors, heating system and electric elevators. Cost, $150,000.

Contract for loft building at 384 Fifth Ave., for Gorham Mfg. Co. has been awarded to C. T. WILLS, 156 Fifth Ave. Cost, $200,000. McKim, Mead & White, Archs. Previously noted.

Geo. J. Hoster, brewer, Columbus, O., is taking figures on a warehouse to be erected at 34th St. and 11th Ave., New York, Henry Maetzel is Arch., Columbus, O. Brick and steel, fireproof, 5 stories, 125 × 100 ft. Engines, generators, refrigerating machinery and heating system.

Schickel & Ditmars, Archs., have awarded general contract for church to be erected at 405 East 79th St., to J. H. PARKER CO., 225 Fourth Ave. Cost, $75,000.

Chas. F. Rose, Arch., 1 Madison Ave., is taking figures on a bachelor apartment building to be located at 644 Madison Ave. R. W. Tailer, 76 William St., is the owner. Brick and stone, 12 stories, 50 × 125 ft. Boilers, blowers, elevators, heating and electric wiring. Cost, $250,000.

Oak Realty Co., care of M. Conroy, of Hargrave Hotel Co., Columbus Ave. and 72d St., is taking figures on general contract for hotel at 105-11 West 71st St. Brick, stone and steel, 12 stories, 65 × 100 ft. Mason work, carpenter work, heating system, plumbing, plastering, boilers, engines, generators, motors, four elevators; switchboards, phone system, culinary equipment, laundry machinery, refrigerating plant of 15 tons capacity, structural and ornamental steel, wire lathing, furniture, pumps, wire lathing and blowers. F. C. Browne, 143 West 125th St., is Arch.; P. R. Moses, 35 Nassau St., is Consult. Engr. Cost, $500,000.

Plymouth Realty Co., 1370 Broadway, desire bids on separate contracts for a hotel to cost $250,000 to be located at 257 West 38th St. Gilbert Robinson & Son, 39 Hancock Place, is Arch. Brick and stone, 9 stories, 40 × 90 ft. Boilers, engines, generators, structural steel and heating system.

Chas. A. Winter, 1714 Lexington Ave., is taking figures on a theater and office building to be erected at Westchester and Bergen Aves. Brick and stone, 10 stories, 100 × 110 ft. Phone system, motors, sprinkler system, structural steel and generators. Cost, $200,000.

Grosvenor Atterbury, Arch., 20 West 43d St., is taking figures on alterations to residence at 21 West 47th St., for Mrs. M. De Forest Clark, to cost about $50,000. Work consists of changes to entire front, adding one-story to present building and an addition in rear of four stories, 40 × 40 ft. Heating system, electric elevator and boilers.

Plans are being prepared by Grosvenor Atterbury, Arch., for a model tenement house the donor of which was H. Phipps, 26 Broadway. The building will be erected at 31st St. and Second Ave., and be controlled by city of New York. Brick and steel, 6 stories, 100 × 200 ft. Boilers, engines, motors and generators. Cost, $400,000.

NEW YORK, N. Y.—The following bids were opened at the Treasury Department, Washington, D. C., May 19, for installing mechanical equipment in new custom-house at New York: Wells & Newton Co., New York, $285,200, to be completed within 120 working days; G. A. Suter Co., New York, $284,000, 150 days; Boyd Equipment Co., New York, $251,900, 300 days; Francis Bros. & Jellett, New York, $282,500, 225 days; John Pierce, New York, $261,356, 250 days; Lynch & Woodward, Boston, Mass., $309,716, 150 days; Jos. McWilliams & Co., Louisville, Ky., $340,986, 300 days; L. H. Prentiss, New York, $336,895, no time specified; S. Forth & Co., Philadelphia, Pa., $272,500, 300 days; J. T. Finn & Co., New York, $299,000, 180 days; Evans, Almirall & Co., New York, $271,164, 400 days; New York Steam Fitting Co., New York, $237,266, 300 days, exclusive of certain features of specifications.

W. G. Pigueron, Arch., 32 Union Square, informs us that contracts for loft buildings for Acme Building Co. will be let within a month or six weeks. Cost, $125,000. Previously noted.

NIAGARA FALLS, N. Y.—Bids are asked until June 26 by James Knox Taylor, Supervising Arch., Washington, D. C., for construction complete of U. S. Post Office at Niagara Falls. (Advertised, Engineering News.)

PRINCETON, N. J.—W. E. Stone, Arch., 55 Broadway, New York, is taking figures on a residence for J. S. Wheaton, of Princeton, to be erected at Princeton. Boilers, motors, electric wiring and heating apparatus. Cost, $100,000.

ENGLEWOOD, N. J.—Davis, McGrath & Shepards, Archs., 203 Broadway, New York, will take bids on residence to be erected at Englewood Cliffs. Cost, $50,000.

Same architects are taking bids for a residence here for D. F. Platt, Mayor of Englewood. Cost, $75,000.

PATERSON, N. J.—The city of Paterson, care of John T. Pollett, Cy. Clk., is taking figures on switchboards and electric wiring for new police station to cost $60,000. David Henry Building Co. is general contractor.

MILLBURN, N. J.—Ernest Green, Arch., 5 Beekman St., New York, is taking figures on a residence to be erected at Millburn, for John Taylor, 487 Broadway, New York. Cost, $50,000.

LITTLE SILVER, N. J.—Thos. W. Carter, of Little Silver, will erect a $10,000 residence from plans by W. G. Lawrence, 3 West 29th St., New York.

ORANGE, N. J.—Board of Education, care of H. Stetson, Secy., will take bids on new school building to be erected at Main and Cleveland Sts. Herbert D. Hale, 92 Williams St., New York, is Arch. Cost, $85,000.

PITTSBURG, PA.—Palmer & Hornbostel, Archs., 63 William St., New York, are taking figures on engines, generators, boilers, motors, switchboards, electric wiring, elevators and heating apparatus for new Technical Carnegie School at Pittsburg.

WESTCHESTER, PA.—Bids are asked by James Knox Taylor, Supervising Arch., Washington, D. C., until June 28, for construction complete of U. S. Post Office at Westchester. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids are asked until July 1 for the construction of the superstructure for the Municipal Building. Capt. Chester Harding, Engrs. (Advertised, Engineering News.)

WASHINGTON, D. C.—Geo. B. Post & Sons, Arch., 33 East 17th St., New York, have been appointed architects for new college buildings for George Washington University at Washington, D. C., of which Dr. Chas. Needham is president. The following buildings are included: Memorial Hall, Alumni Hall, Hall of Diplomacy, Corcoran Hall, School of Architecture, eight dormitory buildings and power house. Cost, $2,000,000.

WASHINGTON, D. C.—Bids are asked until June 3 for furnishing and delivering red bricks, natural hydraulic cement and sand for new building for National Museum. Bernard R. Green, Supt. of Const.

BALTIMORE, MD.—Bids are asked until June 19 for furnishing materials and labor for erection and delivery of a keeper's dwelling at Cape Lookout Light Station, N. C. Col. W. A. Jones, U. S. Engrs. (Advertised, Engineering News.)

NEWPORT NEWS, VA.—Bids are asked by James Knox Taylor, Supv. Arch., Washington, D. C., until June 9 for the installation of pumping machinery for hydraulic lift in U. S. custom-house and post-office building at Newport News.

CHARLESTON, S. C.—Contract for constructing hospital here was awarded to FRANK B. GILBRETH, 34 West 26th St., New York. Bids will be received by Frank B. Gilbreth for sub-contracts. Low pressure heating, generators, engines, boilers, elevators, etc. Cost, $110,000.

SAVANNAH, GA.—Young Men's Christian Association contemplates erecting $75,000 building; W. B. Stubbs, Pres.

JACKSONVILLE, FLA.—Plans have been prepared by Rutledge Holmes, Arch., Jacksonville, for a home for Knights of Pythias. Cost, $75,000.

JACKSONVILLE, FLA.—The Shrine Building Association, Geo. L. Bahl, Pres., has purchased a site on Main St. on which to erect a ten-story building. Cost, $100,000.

WATER VALLEY, MISS.—Board of Supervisors have ordered the issuance of $50,000 of bonds for the erection of proposed jail building.

NEW ORLEANS, LA.—The New Orleans Terminal Co., L. S. Berg, Pres., has purchased site on which to erect proposed union depot. Cost, $2,500,000. D. H. Burnham & Co., Railway Exchange Bldg., Chicago, Ill., are Archs.

SAVANNAH, TENN.—Bids are asked by Building Commissioners until May 31 for construction of new court-house. H. E. Williams, Secy. Cost, $25,000.

WINCHESTER, KY.—ELLIOTT & WINCHELL, of Clarksburg, W. Va., have contract at $57,255 for the erection of building for Kentucky Wesleyan University, replacing structure recently reported burned. Anderson & Faig, Lexington, Ky., are Archs. Contract for the construction of boiler house and the installation of heating and ventilating system has not been let.

FRANKFORT, KY.—Lou[illegible] & Nashville R. R. Co. will erect a ne[illegible] passenger depot here. Cost, $100,000. W[illegible] Courtenay is Ch. Engr., Louisville.

COLUMBUS, O.—Stribling [illegible] Lum, Archs., 85 North High St., are pre[illegible] plans for a seven-story block to be e[illegible] at Chestnut and High Sts. by David C[illegible]. Est. cost, $150,000.

STEUBENVILLE, O.—C[illegible] for new Jefferson County Infirmary [illegible] been awarded to A. W. McDONALD, [illegible] Richmond, O., for $91,167.

CLEVELAND, O.—Bids a[illegible] by A. R. Callow, Secy., Bd. Pub. S[illegible] until May 30 for erection of an indoo[illegible] house on Broadway.

INDIANAPOLIS, IND.—B[illegible] asked by John S. Lazarus, 127 East [illegible] St., until June 3 for the erection of a [illegible] building for Board of Trade.

LAWRENCE, IND.—Bids [illegible] asked until June 14 for constructing, he[illegible] plumbing and electric wiring about 44 [illegible] Capt. B. F. Cheatham, C. Q. M., [illegible].

SOUTH BEND, IND.—JAC[illegible] BODAZ, of Chicago, Ill., has been award[illegible] contract for six-story addition to Oliver [illegible]. Cost, $100,000.

CHICAGO, ILL.—A. W. Buc[illegible] Arch., 21 Van Buren St., let contracts for construction of a six-story fireproof hotel, [illegible] 84 ft., at Vincennes Ave. and 36th St., f[illegible] T. Ave-ill, as follows: Masonry, H. A. [illegible] AFGREN, 138 Washington St.; carpe[illegible] R. P. SHIELDS, Fort Dearborn Bldg.; and iron work, F. P. SMITH WIRE & IRON WORKS, 102 Lake St. Est. cost, $100,000.

Jarvis Hunt, Arch., Monadnock Block, has completed specifications for bank and office building to be built at Monroe and Clark Sts., for the American Trust & Savings Bank. Cost, about $1,500,000.

D. H. Burnham & Co., Archs., Railway Exchange Bldg., are preparing plans for a bank and office building, to be erected at Adams and Clark Sts., for the Commercial National Safe Deposit Co., Wm. J. Chalmers, Pres. Est. cost, $2,500,000.

MADISON, WIS.—The Governor has signed the bill appropriating $185,000 for a new building for the Milwaukee normal school and $100,000 for a new building for the Platteville normal school.

DES MOINES, IA.—Board of Control has awarded contract for steel cells for new cell house at Anamosa prison to the CHAMPION IRON WORKS, of Kenton, O., for $30,000.

LARAMIE, WYO.—W. H. Maxwell, of Pierre, S. Dak., was the lowest bidder, at $79,378, for constructing U. S. post-office at Laramie. James Knox Taylor, Supv. Arch., Washington, D. C.

NEVADA, MO.—Board of Managers of Missouri State Hospital No. 3 will let contract June 2 for the erection of an east wing to building, according to plans and specifications on file at the office of superintendent, Nevada, Mo. John Montgomery, Jr., Pres. of Board.

JEFFERSON CITY, MO.—A company of St. Louis and Jefferson City capitalists will build here 40 houses to cost $120,000. H. E. Roach & Son, Chemical Bldg., St. Louis, are Archs.

Plans for new supreme court building are being completed and bids will be received in about six weeks. Cost, $180,000.

HOT SPRINGS, ARK.—J. W. ATKINSON, Colorado Springs, Colo., has contract, at $115,000, for the erection of court-house for Garland county, replacing structure recently burned.

FORT WRIGHT, WASH.—Bids are asked until June 15 for construction, plumbing, heating and electric wiring of one field officers' quarters, one double set captains' quarters, one eight set bachelor officers' quarters and two double barrack buildings at Fort Wright. Capt. Edw. A. Shuttleworth, Q. M., U. S. A. (Advertised, Engineering News.)

PORTLAND, ORE.—Chas. Sweeney, of Spokane, Wash., will build an eight-story building in Portland, at Morrison and Seventh Sts. Cost, $100,000, to be occupied by Tull & Gibbs. It is to be built this year.

SAN FRANCISCO, CAL.—It is stated that John Grosse, of Chicago, Ill., has leased the property on Fifth and Jesse Sts. and will in the near future erect a hotel and office structure at a cost of $250,000.

BELMONT, NEV.—Bids will be received by County Commissioners until June 5 for construction of a stone and steel jail.

WINNIPEG, MAN.—H. N. Ruttan, Cy. Engr., informs us that plans are being prepared for proposed police station and public hall.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

BRISTOL, VT.—Plans and specifications for construction of gravity system of water-works for this village may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked until June 2, as advertised in Engineering News.

SWANTON, VT.—We are informed that this village is considering putting in a system of water-works which will obtain supply from springs about eight miles from village. Dr. C. E. Allen, Trustee, is official in charge. Leno A. Lapelle, Village Clk.

VERGENNES, VT.—H. Louis Morris, Water Comr., writes us that a special committee appointed by the Mayor to investigate for a new water supply was to report May 23 at a special city meeting.

BUFFALO, N. Y.—Following bids were received May 17 by Francis G. Ward, Comr. Pub. Wks., for 25,000,000-gallon turbine type of pump: Allis-Chalmers Co., Milwaukee, Wis., $26,000; Buffalo Forge Co., Buffalo, N. Y., $27,997; Snow Steam Pump Works, Buffalo, N. Y., $30,490.

Commissioner of Public Works has awarded contract for altering, removing and repairing six boilers at the pumping station to LAKE ERIE BOILER WORKS for $2[illegible],000.

NEW YORK, N. Y.—Bids are asked by John T. Oak[illegible] Comr. Water Supply, Gas and Electricity, until June 7 for furnishing and delivering [illegible] stop cocks for distribution mains, and for furnishing cast-iron special castings.

SCOTIA, N. Y.—Additional contracts for new water-w[illegible] now being installed for this village have [illegible] awarded as follows: Hydrants, FAIRBANKS, MORSE & CO., $1,648; valves and valve boxes, FAIRBANKS, MORSE & CO., $604; cast-iron pipe and specials [illegible] miles, U. S. CAST-IRON PIPE & FOUNDRY CO., $21,143.

VINELAND, N. J.—Bids are asked by Board of Ma[illegible] at 705 Land Title & Trust Bldg., Philadelphia, Pa., until June 7, for installing sy[illegible] of water-works at the Home for the Care [illegible] Training for Feeble Minded Women, at Vineland. Walter E. Sexton, Engr., 1910 [illegible]rket St., Philadelphia, Pa. (Advertised, Engineering News.)

WILMINGTON, DEL.—Bids are asked by Water Com[illegible]ioners until June 5 for construction a[illegible] erection of 12,000,000-gallon vertical triple-expansion self contained crank and flywheel pumping engine, to operate against a head of 275 ft. Theodore A. Leisen, Ch. Engr. Water Dept. (Advertised, Engineering News.)

FORT CASWELL, N. C.—Bids are asked until June [illegible] for sinking 9-in. tubular deep well at this fort. P. H. Williams, Q. M.

JACKSON, MISS.—We are informed that under act of legislature this city is authorized and has voted to have municipal water-works. The present plant is owned by the Light, Heat & Water Co. It is stated that the river water should be filtered and the present plant enlarged. The city is asking extensions and improvements. The city is authorized to spend $25[illegible]0 and would prefer to buy out the present plant, but will build new plant unless present company will arbitrate and sell its interests. The city's contract with the company expires in 1908. W. F. Wilcox is Engr. for Board of Trade.

LUMBERTON, MISS.—Contract for constructing water-works for this place, bids for which were received May 17 by Mayor and Board of Aldermen, has been let to E. J. O'BIERNE, Memphis, Tenn., for $18,843. R. C. Huston, Laurel, Miss., is Engr.

CRESTLINE, O.—Bids are asked by F. P. Hayes, Clk. Bd. Pub. Affairs, until June 5 for the following: Reservoir complete; cast iron water pipes, special castings and miscellaneous castings; hydrants and water cranes; valves; labor and material necessary for laying water pipe, setting valves, hydrants and water cranes. Alternative bids will be received for furnishing: Wood pipe and all miscellaneous fittings; labor and material necessary for laying wooden water pipe, setting valves, hydrants and power cranes. Walter P. Rice Engineering Co., Cleveland, O., are Engrs.

LISBON, O.—Contract for drilling four additional wells for local water-works has been let to W. W. DOW & CO., Salem, O.

LAKEWOOD, O.—Bids are asked by H. W. Burton, Clk., Trustees Pub. Affairs, until June 5 for laying water mains in Mathews, Edanola and Sloan Aves. William H. Evers Engineering Co., Cleveland, O., are Engrs.

CONTINENTAL, O.—Contract for running local water-works plant for next ten years has been let to FRANK KONST, owner of the electric light plant, who will operate water-works plant by electricity.

CROOKSVILLE, O.—Referring to proposed water-works for this place and Roseville we are informed that nothing has been done further than to incorporate the Muskingum Water Co. The supply is to be from the Muskingum River and the estimated cost of the works is $225,000. C. N. Shryock, Zanesville, O., is Manager and official in charge.

CLEVELAND, O.—Following bids were received by Board Public Service May 16, for furnishing cast iron water pipe and special castings: Massillon Iron & Steel Co., Massillon, O., $100,379; U. S. Cast Iron Pipe & Foundry Co., Chicago, Ill., $97,674.

BELDING, MICH.—Bids are reported asked by Wm. E. Fisher, Cy. Clk., until June 5 for furnishing materials and constructing water-works, consisting of two 1,000,000-gallon pumping engines; two 100-HP. boilers; one 100,000-gallon elevated water tower; 1,140 tons 4-in. to 12-in. cast-iron pipe; 13 6-10 tons special castings; 42 hydrants; 75 valves, 4 to 12-in.; pump house, wells, trenching and pipe laying. Riggs & Sherman Co., Engrs., 613 The Nasby, Toledo, O.

CHARLOTTE, MICH.—Mayor C. W. Morrell writes us that this place has voted to issue $10,000 of bonds for water-works extension; bids will be called for soon.

CHICAGO, ILL.—Bids are asked by Department Public Works, J. M. Patterson, Comr., until May 31 for furnishing and installing water-tube boilers, complete, in the 39th St. pumping station.

HERRIN, ILL.—This place has voted to put in new water-works. We are informed under date of May 15 that nothing had been done in the matter at that time. John Herrin is official in charge. Mentioned April 27.

CHICAGO, ILL.—Bids are asked by Department of Public Works until June 20 for furnishing and erecting on foundations furnished by city, four centrifugal and screw pumping engines for sewerage pumping station at Lawrence and Evanston Aves. (Advertised, Engineering News.)

ALBIA, IA.—John T. Clarkson is Chn. of Citizens' Committee which is endeavoring to further a water-works proposition for this place.

NASHWAUK, MINN.—Bids are asked until June [illegible] for constructing water-works for this village. Work consists of laying about 1,500 ft. of 8-in. and 3,700 ft. of 6-in. cast iron pipe, with specials, and twelve hydrants, excavating a well, setting in place with all steam and water connections two pumps and boilers, erecting pump houses and erecting water tower. Paul H. Tvedt, Village Recorder. T. R. Dodson, Pres.

WELCOME, MINN.—C. H. Oltman, Village Recdr., writes us that no arrangements have been made for water-works as bonds had not been sold. Village was to sell $7,000 of water bonds May 1.

HARMONY, MINN.—Bids are asked by H. C. Horsrud, Village Recdr., until June 2 for furnishing and laying about 1,300 ft. of cast-iron water mains.

IVANHOE, MINN.—Bids are asked by W. W. Panneck, Village Recdr., until 8 p. m., May 29, for extending water mains.

LAKE PARK, MINN.—Bids are asked by Ira Schannach, Village Recdr., until 8 p. m., June 5 for furnishing and laying 725 ft. 6-in. and 275 ft. 4-in. pipe.

ST. PAUL, MINN.—Bids are asked by County Commissioners, Edw. G. Krahmer, County Audr., until June 5 for deepening Well No. 2 at White Bear Lake, Minn., and for removal and replacement of roof, floor and pump at present in use and such other work as may be necessary in connection therewith.

ST. CLOUD, MINN.—We are informed that construction of sand filtration plant to cost $50,000 is under consideration. J. E. Hill is Cy. Engr.

SEDAN, KAN.—Mayor Wm. Johnson writes us that $35,000 of bonds for new city water-works have been voted; arrangements will be made as soon as possible.

CAMBRIDGE, NEB.—This city has employed Burns & McDonnell, Engrs., Kansas City, Mo., to prepare plans and estimates for water-works system, for which bond election will soon be called.

ALMA, NEB.—We are informed that this city has changed date of its water-works letting from June 8 to June 22. M. A. Earl, First National Bank Bldg., Chicago, Ill., is Consult. Engr. Mentioned May 18.

FORT ASSINNIBOINE, MONT.—Following bids were received May 18, by Capt. J. B. McDonald, Q. M., for furnishing and installing boilers, pumps, etc.: Healy Plumbing & Heating Co. St. Paul, Minn., $8,900; A. Motschman, Chicago, Ill., $9,840; W. D. Lovell, Minneapolis, Minn., $9,099; Dwyer Plumbing & Heating Co., St. Paul, Minn., $9,790; G. A. Kees Domestic Engr. Co., St. Paul, Minn., $9,983.

LA JUNTA, COLO.—Contract for constructing gates and outworks of storage reservoir, bids for doing which were received May 15, by Otero Irrigation District, F. T. Lewis, Ch. Engr., has been let to PUEBLO BRIDGE CO., Pueblo, Colo., for $6,050. Work includes 300 ft. outlet pipe, reinforced concrete two 30-in. valves, concrete house over valves and grating over inlet.

DENVER, COLO.—Bids were opened by U. S. Reclamation Service May 16 for construction of about 45 miles of main canal in connection with the North Platte irrigation project; the work was divided into ten divisions, the lowest bidders being as follows: Division one: Robinson & Maney, Denver, $40,509. Division two: Robinson & Maney, $42,332; Griffith & McDermott, Chicago, $42,745. Division three: Kilpatrick Bros. & Collins, Beatrice, Neb., $76,817. Division four: Deadwood Construction Co., $33,195; Division five: Kilpatrick Bros. & Collins, $71,384. Division six: Robinson & Maney, $35,335. Division seven: Robinson & Maney, $35,135. Division eight: James O'Connor, Morgantown, Ind., $37,500; Robinson & Maney, $37,735. Division nine: Robinson & Maney, $33,266; Division ten: Robinson & Maney, $29,700. The divisional bids of Kilpatrick Bros., Orman & Crook, Pueblo; Robinson & Maney, Griffith & McDermott, W. C. Bradbury, Denver, and the Burk Construction Co., St. Louis, also went for the entire work.

RIVERSIDE, CAL.—Bids are asked by C. F. Larrabee, Acting Comr. Indian Affairs, Washington, D. C., until June 8 for constructing irrigation system for the Indian school at Riverside.

SOLDIERS' HOME, CAL.—Bids are asked by T. J. Cochrane, Treas., Pacific Branch, N. H. D. V. S., until June 8 for construction of storage reservoir.

WHITTIER, CAL.—Specifications for furnishing water pipe, boilers, pumps, etc., and for constructing well for this city may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked until June 12, as stated in our issue of May 18.

AMERICAN FORK, UTAH.—We are informed that this city will not install water-works this year, but may do so next year. Mayor James N. Clarke is official in charge.

MONTPELIER, IDAHO.—Bids are asked by Montpelier Irrigation District, W. J. Hunter, Pres., until June 10 for material and labor for construction of Montpelier irrigation canal in Bear Lake County; canal is to be 27 miles long. Washington Jenkins, Engr. (Advertised, Engineering News.)

WINNIPEG, MAN.—Bids are asked by Chairman Fire, Water and Light Committee until June 5 for supply of water pipe and specials for high pressure fire service and for supply of following quantities of water meters: 1,500 ½-in. meters, 200 ¾-in. meters, 50 1-in. meters. C. J. Brown, Cy. Clk. (Advertised, Engineering News.)

PRESTON, ONT.—We are informed that a system in this town is under consideration, but the matter as yet has not been fully gone into. C. R. Hanning is Town Clk.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

WAVERLY, N. H.—Williams & Whitman, Engrs., New York, are preparing plans for sewerage system and sewerage disposal plant for Waverly. Bids will be advertised for in about six weeks.

LITTLETON, N. H.—HENRY BISHOP was awarded contract for sewers here. Cost, about $4,000.

BOSTON, MASS.—Bids are asked until May 29 for construction of a sewerage system at Fort Andrews, Peddocks Island, Mass. Maj. John E. Baxter, Q. M., U. S. A., 170 Sumner St., Boston.

MARION, MASS.—Plans have been prepared by Williams & Whitman, Engrs., Whitehall Bldg., New York, for sewer, two pumping plants and sand filters for the town of Marion. Cost, about $30,000. A bond issue will probably soon be authorized. Chas. H. Delano is Town Clk.

LOWELL, MASS.—The Committee on Sewers has voted to recommend new sewers for Bowden and Olney Sts. and Hoyt Ave and to extend sewer in Pine St. Total cost $3,500.

WATERBURY, CONN.—Bids are asked until June 20 for construction of Sec. 1 of the Main Carrier, a reinforced concrete and brick intercepting sewer. R. A. Cairns, Cy. Engr. (Advertised, Engineering News.)

BUFFALO, N. Y.—Bids are asked by Department Public Works until May 31 for construction of sewers in portions of various streets. Francis G. Ward, Comr.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Boro. Pres., until May 31 for furnishing material and constructing a sewer in portions of Washington, Greenwich, Morris and East 24th Sts.

BROOKLYN, N. Y.—Bids are asked by Martin W. Littleton, Boro. Pres., until May 31 for furnishing material and constructing sewers in portions of Greenpoint, Fourth and Albany Aves.

SYRACUSE, N. Y.—We are informed that the Board of Contract and Supply has awarded to JOHN DAVIN, of Syracuse, the contracts for sewers in Emerson Ave., Harriman and other streets. Total cost, $20,873.

DUNKIRK, N. Y.—Common Council has recommended the building of sewer system in Fourth Ward. Jas. P. Morrissey is Cy. Engr.

LESTERSHIRE, N. Y.—The following bids were received by Board of Trustees May 12 for constructing sewers: H. Clements, Jr., Schenectady, $36,429; Timothy Reynolds, Fulton, $40,000; Samuel Bond, Syracuse, $32,-[illegible]; Frank Pidgeon, Saugerties, $36,375; D. M. Rosser, Kingston, Pa., $36,457; T. D. Allen & Co., Oneida, $31,390; M. A. Donahue, Scranton, Pa., $32,875.

BUFFALO, N. Y.—Sewer Committee of Board of Aldermen will report in favor of William Franklin's bid of $18,900 for construction of sewer in Hertel Ave.

AMSTERDAM, N. Y.—We are informed that the following contracts were awarded May 17 by Sewer Commissioner: CONOVER & REID, 1,300 ft. 8- and 10-in. sewers and 140 6-in. inverted iron syphons, $2,672; JOS. LYON, 1,100 ft. 8- and 10-in. sewers, $1,489; ANTONIO PANTALONE, 500 ft. 15-in. storm drains and three catchbasins, $695. F. E. Crane, Cy. Engr.

ONEONTA, N. Y.—The contract for construction of Clinton and Gilbert Sts. sewers has been awarded by Bd. Sewer Commissioners to WOOD & JAMESON, of Sidney.

NEWTON, N. J.—Bids will be advertised for in about four weeks for proposed sewerage system here. Cost, about $90,000. Williams & Whitman are Engrs., New York.

ALLENTOWN, PA.—It is stated that the contract for Liberty St. sewer was awarded to WAIDELICH & STEPHENS, for $7,894.

HARRISBURG, PA.—Contracts for constructing sewers in various streets were awarded to GEO. STUCKER & BRO. Total cost, $4,164.

ERIE, PA.—Bids are asked until June 1 for construction of 6-in., 9-in., 12-in., 15-in., 18-in. and 24-in. sewers. B. E. Briggs, Cy. Engr. (Advertised, Engineering News.)

MT. CARMEL, PA.—Bids were received by the Borough Council May 18 for the construction of a sewer system. R. A. Malone & Co., Lancaster, Pa., at $62,258, was low bidder, and will probably be awarded the contract. Next lowest bidder was Caldwell, Barry & Co., Broad and Arch Sts., Philadelphia, Pa., at $74,288. Itemized bids will be given under Contract Prices.

SAYRE, PA.—We are informed that Sayre Borough has employed Williams & Whitman, Engrs., of New York, to make survey for sewers, and when completed the Borough will vote on the issuance of bonds. It is probable that the question will be voted on some time in September. Geo. D. Bonfoey, Boro. Treas.

MILTON, PA.—Bids are asked by Town Council until June 13 for construction of sanitary sewer on Shakespeare Ave. and Mahoning St., requiring about 1,150 ft. of 10-in. and 425 ft. of 8-in. terra cotta pipe, together with necessary manholes, house connections, etc.

EASTON, PA.—Sewer Committee has approved ordinance providing for a sewer in Northampton St.

ENOLA, PA.—Pugh & Hubbard, Engrs., Real Estate Trust Bldg., Philadelphia, have completed plans for extensive land improvements for Enola Realty Co. A sewerage and electric plant will be erected. Engineers in charge.

SUSQUEHANNA, PA.—Bids are asked by Borough Council until June 7 for construction of sewers in various streets. D. J. Lynch, Secy.

WASHINGTON, D. C.—Following bids were received May 17 by District Commissioners for constructing sewers: James A. Coyle, Washington, $29,638; The J. Connelly Co., Washington, $25,169; J. H. Louchheim, Philadelphia, Pa., $27,507; E. G. Gummel, Washington, $28,677; Lyons Bros. & Co., Washington, $26,140; John F. Talbert, Washington, $25,704. D. E. McComb, Supt. Sewers.

MORGANTON, N. C.—A. C. Avery, Jr., Mayor, writes us that the city has voted $12,000 bonds for sewerage purposes. Estimates on the work have already been made by engineers and committee appointed to receive bids.

DAWSON, GA.—It is reported that city will vote on the issuance of $80,000 of bonds for construction of water-works and sewerage system. Address the Mayor.

JASPER, ALA.—We are informed that P. Byrne, Consult. Engr., Birmingham, Ala., is making a survey for a sanitary sewer system for this town. A portion of same will be let in about three weeks or as soon as plans and specifications can be prepared.

TUSCUMBIA, ALA.—The city is considering the construction of a sewerage system. The Mayor can inform.

BIRMINGHAM, ALA.—All bids received by Jefferson County Sanitary Commissioners May 4 for constructing Valley Creek sewer were rejected and new bids advertised for. The contract for building septic tank on Village Creek trunk sewer was awarded to JEFFERSON CONSTRUCTION CO., for $6,606.

MERIDIAN, MISS.—Bids are asked by I. R. McElroy, Cy. Clk., until June 9 for construction of storm and sanitary sewers.

NASHVILLE, TENN.—Board Public Works awarded to J. A. WEBB the contract for building a sewer here, for $2,289.

LAKEWOOD, O.—Bids are asked by Henry J. Sensel, Vil. Clk., until June 5 for laying of sewer mains in Matthews, Elanola and Sloane Aves.

MIDDLETOWN, O.—Plans and specifications are being prepared by City Engineer for a sewer in North Broad St.

FREMONT, O.—Faragher & Randall, of Lorain, O., were the lowest bidders, at $19,135, for constructing new East Side trunk sewer in Fremont.

LEETONIA, O.—The city contemplates laying sewers and erecting pumping station and purification plant, to cost about $30,000. Williams & Whitman, Engrs., New York.

CAMBRIDGE, O.—Bids are asked by Board Public Service until June 12 for constructing sanitary and storm systems of sewers. Approximate quantities: 321 ft. 20-in., 618 ft. 15-in., 300 ft. 12-in., 4,518 ft. 8-in. and 4,120 ft. 4-in. of vitrified sewer pipe; 1½ tons 8-in. c.-i. pipe; 407 cu. yds. rock excavation; 48 cu. yds. concrete; 13 manholes; 7 flush tanks; 6 catchbasins. O. M. Hoge, Cy. Engr.

COLUMBUS, O.—Bids are asked by Board Public Service until May 31 for constructing South Side sanitary sewer. Julian Griggs, Ch. Engr.

MANSFIELD, O.—Bids are asked by Board Public Service until June 1 for construction of sewers in various streets.

CINCINNATI, O.—Bids are asked by Board Public Service until June 1 for sewering Summit Ave.; est. cost, $2,502. J. E. Breen, Ch. Engr.

CINCINNATI, O.—Bids are asked by Board Public Service until June 15 for constructing 4-ft. sewer in Lelland Ave.; est. cost, $6,178.

TELL CITY, IND.—Bids will be received by City Clerk until June 1 for construction of Humbolt St. sewer.

RICHMOND, IND.—Board Public Works has ordered H. L. Weber, Cy. Engr., to prepare plans for a storm-sewer in North 11th St.

GREENSBURG, IND.—City Council has ordered the clerk to advertise for bids for construction of a sanitary sewer and a storm sewer. Est. cost, $130,000.

DETROIT, MICH.—John Ginzel & Co., of Wyandotte, were the lowest bidders, at $3,945, for building of Chene St. outlet sewer.

GRAND RAPIDS, MICH.—L. W. Anderson, Cy. Engr., writes us that the west side sewer, about 2½ miles long, will probably be ordered by Common Council in the near future.

ROCKFORD, ILL.—Bids are asked by President Board Local Improvements, until June 6 for constructing sewers, estimated cost of which is $7,000. Edwin Main, Cy. Engr. (Advertised, Engineering News.)

WILMETTE, ILL.—Public meetings are being held to discuss plans for a sewerage system.

OCONTO, WIS.—Bids are asked by Board Public Works until June 17 for constructing sewers in the city during season of 1905.

STEVENS POINT, WIS.—Bids are asked by H. J. Finch, Cy. Clk., until June 3 for construction of sewers on Main, Division, North Second, Franklin and North First Sts.

SHAWANO, WIS.—Council rejected all bids for completion of sewage system because none were presented in proper form. The lowest bid was $8,000.

DES MOINES, IA.—Bids are asked by Board Public Works, until May 30 for construction of sewers; est. cost $40,000. John W. Budd, Cy. Engr.

CLINTON, IA.—The city of Clinton on May 15 declared in favor of permanent sewers. Proposition involves about $250,000. Chas. P. Chase, of Iowa Engineering Co., is Cy. Engr.

LAKE CITY, MINN.—Bids are asked by Common Council until May 27, 6 p. m., for laying an 8-in. sewer pipe. A. W. Corwin, Recdr.

ST. PAUL, MINN.—Board Public Works will construct a sewer in Lincoln Ave. Est. cost, $2,266. L. E. Rundlett is Cy. Engr.

FAULKTON, S. DAK.—The contract for putting in sewerage was awarded to JONES & ROEDERICK by City Council, for $9,122.

MARYVILLE, MO.—Bids are asked by City Clerk until June 6 for construction of about 32,838 lin. ft. of vitrified pipe sewers, three flush tanks, nine manholes, 25 lampholes, etc. Geo. Custer, Cy. Engr.

ST. JOSEPH, MO.—Rackliffe & Gibson have consented to the forfeiture of their guarantee of $1,000 which accompanied their bid on south side sewer. Their bid was something over $96,000, the next lowest being the bid of John Mahoney, of Kansas City, Kan., at $139,683. It will probably be decided to readvertise.

FORT WORTH, TEX.—The sewer system of this city is to be extended. City Council will soon take definite action on the matter. Est. cost, $77,000.

BELLINGHAM, WASH. — Contract for building Elk St. trunk line sewer and septic tank was let by Council to K. SAUSET, for $6,921.

CHAS. E. LIND, received contracts for construction of sewers in E and Forest Sts., at $4,860.

SEATTLE, WASH.—Ordinance has been passed by City Council ordering sewer in Tenth Ave., N. E., and other streets. Est. cost, $4,300. R. H. Thomson, Cy. Engr.

SONORA, CAL.—Bids are asked by J. B. Doyle, County Clk., until June 6 for construction of county hospital sewer.

STOCKTON, CAL.—JOHN CRAVEN has been awarded contract for construction of lateral sewers in various streets, at $5,122.

PASADENA, CAL.—T. D. Allin, Cy. Engr., informs us that bids will be received until June 5 for laying sewers in Summit Ave., Penn and Montana Sts.

OGDEN, UTAH.—A. F. Parker, Cy. Engr., writes us that plans and specifications for Sewer District No. 10 are being prepared and that bids will be called for at once. Est. cost, $110,000.

IDAHO FALLS, IDAHO.—Contract for constructing pipe sewer system for this city has been let to HANLY & RITCHIE, Topeka, Kan. Bids were received May 12, and successful bid is given under Contract Prices. Louie C. Kelsey, Salt Lake City, Utah, is Engr.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

NEW YORK, N. Y.—Bids are asked by the Commissioner of Street Cleaning, 13 Park Row, until June 5, for furnishing labor and materials required to construct and install a conveyor for the rubbish incenerator at Delancey Slip.

CHESTER, PA.—Contract for collection and disposal of garbage during remainder of fiscal year has been let to CHARLES C. GEARY, for $2,300.

NEW ORLEANS, LA.—Bids are asked until 1 p. m., May 29, for construction of three steel garbage boats for use of Department of Public Works. Chas. R. Kennedy, Cy. Comptroller.

SACRAMENTO, CAL.—Following bids were received May 8 by Board City Trustees for installation of 40-ton plant: Dundon Iron Works, San Francisco, Meldrum system, $12,628, or with adjustment of heat to create steam power, $15,566; Decarrie Mfg. Co., Decarrie system, $18,725; Standard Construction Co., Chicago, for $16,000.

OTTAWA, ONT.—Alderman John H. Askwith and N. J. Ker, Cy. Engr., have been making an inspection of garbage plants in the United States, with the object of recommending a suitable plant for this city.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

WEST SPRINGFIELD, MASS.—Jos. W. HAYDEN, 888 State St., Springfield, has been awarded contract for laying 1,000 ft. of curbing on Main St.

STOUGHTON, MASS.—Geo. O. Wentworth, Town Clk., writes us that about one mile of state highway will soon be let by the State Highway Commissioners at Boston.

HOLYOKE, MASS.—The contract for 3,000 sq. yds. of wooden paving blocks was awarded May 16 to DANIEL O'CONNELL'S SONS, 188 Hampden St., Holyoke, who are to furnish Kreodone blocks made by Republic Creosoting & Chemical Co., of Indianapolis, Ind.

NEW HAVEN, CONN.—The contract for paving of Spicer St. was let by Board Public Service May 10 to E. McSHAFFREY & SON for $9,647. Akron granite block, tar filler with sand base will be used.

AUBURN, N. Y.—On May 15 J. Walter Ackerman, Cy. Engr., presented plans and specifications for 14,000 sq. yds. of paving of either bitulithic, asphalt or paving brick as Council may determine after bids are presented.

Additional paving amounting to about 50,000 sq. yds. is petitioned for under special paving act which will be considered May 29.

WELLSVILLE, N. Y.—F. M. Leonard, Vil. Clk., writes us that the contract for paving of South Main St. was awarded May 15 to R. W. HENSON, of Geneva, N. Y., at $21,827, for Jamestown brick.

BINGHAMTON, N. Y.—The INGALLS STONE CO. was awarded contract for construction of cement curb on Upper Court St., at 40 cts. per ft.

ALBANY, N. Y.—The contract for paving Hudson St. with macadam was awarded to ROBT. SHAFER, of Albany, for $25,564.

SYRACUSE, N. Y.—C. T. Hookway, of Syracuse, was the lowest bidder for paving Pearl and Tallman Sts. with brick, at $5,646 and $9,769, respectively.

NEW YORK, N. Y.—Bids are asked by Commissioners of Parks until June 1 for laying cement sidewalks on streets adjacent to and around several parks in Borough of Brooklyn. John J. Pallas, Pres.

AMSTERDAM, N. Y.—Bids are asked until June 6 for constructing about 1,200 yds. fireclay block pavement on Chuctanunda St. F. E. Crane, Cy. Engr. (Advertised, Engineering News.)

ELMIRA, N. Y.—Bids will be received by Board Public Works until June 1 for paving a portion of West Clinton St.

CORNING, N. Y.—Bids are asked by Board Public Works, H. N. Canfield, Supt., until June 15 for laying about 1,700 ft. of brick pavement on East Market St. (Advertised, Engineering News.)

GLOVERSVILLE, N. Y.—Bids are asked until June 5 for constructing about 9,100 sq. yds. asphalt block pavement on concrete foundation and on bitulithic pavement, and for setting about 5,500 lin. ft. of curb on concrete foundation. Morrell Vrooman, Cy. Engr.; M. V. B. Stetson, Cy. Clk. (Advertised, Engineering News.)

ATLANTIC CITY, N. J.—The contract to build Albany Ave. across Chelsea Heights to approach of new Meadow Boulevard was awarded May 10 to CELIAX & CALDWELL of Philadelphia, Pa. Cost, $7,000.

ERIE, PA.—MAYER BROS., 1213 State St., Erie, were awarded contract for paving Sixth and Ninth Sts. with asphalt.

MORRISTOWN, PA.—We are informed that the survey for 29 miles of sanitary sewers is being made and that bids will be advertised for about July 1. S. E. Corson, Boro. Engr.

YORK, PA.—The BARBER ASPHALT PAVING CO. will pave North George and South Beaver Sts. and West York Ave. with asphalt, at $1.35 per sq. yd. for North George St., and $1.54 per sq. yd. for the other two.

WASHINGTON, D. C.—Bids are asked by District Commissioners until June 10 for furnishing granite curbing, asphalt blocks, red sewer bricks, sand and gravel, terra cotta sewer pipe, etc. (Advertised, Engineering News.)

HENDERSON, N. C.—This (Vance) county has voted to issue $20,000 bonds for constructing and improving county roads. Jas. Amos is Chn. County Commissioners.

WILMINGTON, N. C.—Hanover County will vote June 7 on the issuance of $50,000 of bonds for road improvements. Address County Auditor.

FORT CASWELL, N. C.—Bids are asked until June 1 for constructing roads and walks here. R. H. Williams, Q. M.

GREENVILLE, MISS.—City has awarded contract for RUDOLPH S. BLOME & CO., of Chicago, Ill., at 12.9 cts., for laying granolithic sidewalks on all of its streets; about $100,000 will be expended.

MERIDIAN, MISS.—Waldo G. Myers, Engr., writes us that specifications are now being printed for brick sidewalks, estimated to cost $40,000. Date for opening bids has not been set.

DANVILLE, KY.—Bids will be received by Reed S. Nichols, Chn. Com. of Boyle County fiscal court, until June 1 for constructing turnpike from Junction City to Pine Knob turnpike, near Alum Springs.

WYOMING, O.—Bids are asked by W. A. Clark, until June 10, for construction of cement sidewalks on Springfield, Barney and Grove Aves.

CINCINNATI, O.—Bids are asked by Board Public Service until June 8 for the improvement of Conroy St. by grading, setting curbs and paving roadway with brick and constructing necessary drains and retaining walls. Geo. F. Holmes, Clk.

DAYTON, O.—Bids are asked by Wm. F. Miller, Clk. Bd. Pub. Serv., until May 31, for grading and graveling roadway and sidewalks on Barney St.

COLUMBUS, O.—Bids are asked by Board Public Service until June 1 for grading and paving with asphalt on Hildreth Ave. and Almond Alley. Chas. H. Frank, Secy.

CINCINNATI, O.—Bids are asked by County Commissioners until June 16 for improving Fleming Road in Springfield Township. Eugene Lewis, County Audr.

CINCINNATI, O.—Bids are asked by Board Public Service until June 12 for paving Borden St. with brick; est. cost, $45,411. Also for paving Poplar St. with granite; est. cost, $7,142.

CINCINNATI, O.—Bids are asked by Board Public Service until June 15 for paving on Fifth St. with asphalt; est. cost, $4,088.

Bids will be received at the same time and place for paving Prospect Place with bithulithic. Est. cost, $22,556.

CLEVELAND, O.—Bids are asked by Board Public Service until May 30 for laying about 2,600 sq. yds. of macadam pavement on drives in Edgewater Parkway. A. R. Callow, Secy.

TERRE HAUTE, IND.—The following bids were received by Board Public Works, for paving Wabash Ave., with brick: FOULKES-FORBES CO., Terre Haute, $27,688 (awarded contract); Roberts & Co., $27,749; W. H. Harris, $27,785; Michael Stevens, Marion, Ind.; $27,902; Jesse Robertson, $28,500; Keegan Bros., Brazil, Ind., $29,890.

ROCKPORT, IND.—Bids are asked by County Commissioners until June 5 for construction of a gravel road in Penn Township. Henry Grubb, County Audr.

SHELBYVILLE, IND.—Bids will be received by Council until May 30, 7:30 p. m., for construction of cement sidewalks on Noble, Pike, Howard, Locust and Miller Sts., and for a cement curb and gutter on Franklin. St. E. C. Newton, Cy. Clk.

RICHMOND, IND.—Board Public Works has ordered H. L. Weber, Cy. Engr., to prepare plans for macadamizing of North Third and South E Sts.

ROCKVILLE, IND.—Bids are asked by County Commissioners until June 5 for grading and graveling roads in Racoon Township. Henry Grubb, County Audr.

BEDFORD, IND.—Bids are asked by Walter G. Owen, County Audr., until June 5 for construction of four miles of pike road in Shawswick township.

BROWNSTOWN, IND.—Bids are asked by H. W. Wacker, County Audr., until June 6 for construction of over three miles of gravel road.

MISHAWAKA, IND.—The City Clerk will soon ask for bids for paving of 14 streets with Warren Bros. bitulithic pavement. Est. cost, $260,000.

EVANSVILLE, IND.—Board Public Works will soon ask for bids for paving of Water St. with brick for three blocks and with asphalt for three blocks.

WINAMAC, IND.—Bids are asked by County Commissioners until June 5 for constructing two roads, total length 63,418 ft. Ellis S. Rees, County Audr.

BLOOMFIELD, IND.—Bids will be received by County Commissioners until June 5 for construction of gravel and macadamized roads in Grant Township. W. H. Deckard, County Audr.

EVANSVILLE, IND.—Resolutions and specifications on street improvements to take place the coming summer were adopted by Board Public Works. August Pfafflin is Cy. Engr.

BAY CITY, MICH.—Board Public Works has accepted the estimates for Broadway pavement. Cost, $53,970.

HOUGHTON, MICH.—Bids are asked by Casper Brand, Vil. Clk., until June 12 for grading, curbing and paving of College Ave.

TRAVERSE CITY, MICH.—Bids are asked by Board Public Works until June 2 for paving on State St., about 11,545 sq. yds., and 5,580 ft. of curbing.

ANN ARBOR, MICH.—Bids are asked until June 3 for 8,000 sq. yds. brick or asphalt block on North University Ave. and Ashley St. Ross Granger, Cy. Clk. (Advertised, Engineering News.)

CHARLOTTE, MICH.—We are informed that the city of Charlotte has just voted to bond for $35,000 for paving to be done this summer. Bids will be advertised for soon. C. W. Morrell, Mayor.

CHICAGO, ILL.—Board Local Improvements, May 13, ordered street pavements laid at a total cost of about $1,000,000. John Ericson is Cy. Engr.; J. M. Patterson is Comr. Pub. Wks.

BLOOMINGTON, ILL.—Elmer Folsom, Cy. Engr., informs us that ordinances were passed May 19 for asphalt pavement on Mulberry St. and brick pavement on West Olive St.

NEENAH, WIS.—E. W. Thurston, Cy. Engr., writes us that plans have been approved for paving of Commercial St. with brick and that bids will soon be advertised for.

ST. CLOUD, MINN.—J. E. Hill, Cy. Engr., informs us that plans, estimates, etc., for 9,000 sq. yds. of granite block paving will be submitted to Council June 5. Est. cost, $27,000.

SOUTH OMAHA, NEB.—Plans are being prepared by Herman Beal, Cy. Engr., for repaving of 24th St. with asphalt, about 40,000 sq. yds.

KANSAS CITY, KAN.—Bids are asked by Frank H. Holcomb, County Clk., until June 5 for constructing macadam pavement on Parallel Road, a distance of one mile.

EMPORIA, KAN.—Bids will be received until June 5 for grading, curbing and paving on Union and State Sts. G. O. Mathewson, Cy. Clk.

PINE BLUFF, ARK.—I. P. SHIPLEY has contract for paving with Pittsburg vitrified pressed brick ten or more blocks, at $1.96 per sq. yd.

SEATTLE, WASH.—Ordinances have been passed by City Council ordering street improvements estimated at $115,100. R. H. Thomson is Cy. Engr.

SEATTLE, WASH.—Bids are asked by C. B. Bagley, Secy. Bd. Pub. Wks., until May 27 for laying concrete walks on East Columbia and other streets and for grading 24th Ave. N. Total estimate $23,350.

WALLA WALLA, WASH.—Bids are asked by County Commissioners until June 5 for construction of cement walks about courthouse grounds. W. J. Honeycutt, County Audr.

SEATTLE, WASH.—Following bids were received May 13 by C. B. Bagley, Secy. Bd. Pub. Wks., for constructing cement sidewalks on Wallingford Ave. and other streets: Thorsrig & Lindland, Seattle, $51,723; Coast Concrete Co., Seattle, $51,410; Hans Pederson, Seattle, $53,902; McAdam & Cannon, Seattle, $59,423.

SAN FRANCISCO, CAL.—The Board Public Works has directed that bids be asked for paving of Mission St. with asphalt. Thos. P. Woodward is Cy. Engr.

LOS ANGELES, CAL.—Harry F. Stafford, Cy. Engr., writes us that on April 24 the council ordered plans for the paving of Central between 12th and Slauson Ave., but as yet nothing has been done, and it will be several months before bids will be received.

LUCKNOW, ONT.—Tenders are asked until May 31 for construction of about 34,000 ft. of granolithic sidewalks. P. A. Malcomson, Vil. Clk.

LINDSAY, ONT.—Tenders will be received by F. Knowlson, Town Clk., until June 1 for construction of about 14,500 ft. of cement sidewalks. W. C. Way, Town Engr.

NEW HAMBERG, ONT.—Contract for constructing concrete walks and crossings for this village has been let to MAPLE LEAF ARTIFICIAL STONE CO., Simcoe, Ont., for 9 cts. per sq. yd. Bids were received May 1 by W. Millar, Village Clk.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

SHELDON SPRINGS, VT.—The Missisquoi Pulp Co., Sheldon Springs, have contracted with the ABERTHAW CONSTRUCTION CO., of Boston, Mass., to build a concrete-steel dam across the Missisquoi River. The dam will be about 300 ft. between abutments and at all heights from 15 ft. to 38 ft. The Engineers of the dam are the Ambursen Hydraulic Construction Co., 176 Federal St., Boston, Mass., and the design is such to warrant the dam against the heavy ice gorges which in the past have carried out several crib dams at that point. Work will be commenced immediately.

BARTON LANDING, VT.—Plans of six houses to be erected by Chandler Mfg. Co. will be ready for figuring about June 1.

RUSSELL, MASS.—The contract for power development of the Otis Fibre Board Co., on Westfield River at Russell, has been awarded to AMBURSEN HYDRAULIC CONSTRUCTION CO., 176 [illegible]eral St., Boston. The engineer is Chas K[illegible]arns, 93 Federal St., Boston. The deve[illegible]nt consists of a concrete-steel dam 290 [illegible] and all heights up to 30 ft. A power h[illegible] incorporated in the dam as a part of th[illegible]ture. The contract for the wheels ha[illegible] awarded to S. MORGAN SMITH CO.

NEW BRITAIN, CO[illegible]—The North & Judd Mfg. Co. has pl[illegible]or a five-story factory building, 56 × 1[illegible] Griggs & Hunt are Archs., Waterbury.

NEW BRITAIN, C[illegible]—The Stanley Works is making plans [illegible] building, to be located on Myrtle St., to [illegible]ed for storage purposes. The plans ar[illegible] made in the factory office. Brick, 8 [illegible], 100 × 122 ft.

PLAINVILLE, CONN.—[illegible] Trumbull Electric Co., of Plainville, ma[illegible]urers of electrical supplies, has award[illegible]tract for construction of new factory [illegible]. The structure will be 40 × 106 f[illegible] brick, and a boiler house, 30 × 40 ft., [illegible] be erected.

CANASTOTA, N. Y.—P[illegible] and specifications for wagon factory [illegible] Wat on Wagon Co., have been complet[illegible] Archimedes Russell, Arch., Syracuse, [illegible]. No definite date has been made for [illegible]. The company will need one 200-H[illegible] Corliss engine and one additional 125-H[illegible] boiler. Cost of building, $36,000; equipme[illegible] $10,000. Previously noted.

NEW YORK, N. Y.—L. C. Holden, Arch., 1135 Broadway, has plans i[illegible]ogress for a cold storage building to b[illegible] erected at 528 West St., for A. D. Ru[illegible], 52 Wall St. Brick and stone, 6 storie[illegible], 25 × 200 ft. Engines, generators, motor[illegible]vators, boilers, refrigerating plant, h[illegible] system, etc.

Philip Goerlitz, 242 East 51[illegible] St., will erect a factory on 24th St. Brick, [illegible]one and steel, 10 stories, 75 × 100 ft. Owner will build and desires figures at once on all sub-contracts.

Kurtzer & Rentz, Archs., 194 Bowery, are taking figures on a factory to be located at 180-94 Mott St., for Herrman estate, 234 Canal St. Brick, 6 stories, 180 × 200 ft. Boilers, generators, motors, electric wiring, wood-working machinery and tools, steel stack, elevators, shafting and belting, pumps, blowers and sprinkler system will be required, together with a hot water heating system, plumbing and office fixtures. Nothing will be decided regarding the award of contracts until the city decides upon the width of street facing proposed factory. Cost, $300,000.

Maynicke & Franke, Archs., 298 Fifth Ave., have plans in progress for factory to be erected at 401-11 Washington St. for Ragus Tea & Coffee Co., 79 Water St. Brick and stone, 6 stories, 100 × 100 ft. Cost, $150,000.

The Fireproof Mfg Co., 128 Broadway, are about ready for figures on following equipment for their new factory at Exterior St., near Ferncliff Place: Boilers, engines, motors, generators, elevators, shafting, belting, heating system, plumbing, stack, switchboards, electric wiring, patent machinery, mixers, evaporators and incidentals. Cost, $75,000.

BAYONNE, N. J.—Dodge & Day, Engrs. and Archs., Philadelphia, Pa., have been commissioned by the Electro-Dynamic Co. to make a thorough examination of the existing methods in their shops at Bayonne, and submit report thereon as a basis for changes and improvements contemplated by the management. Business of the Dynamic Co. has increased to such an extent that it has become an urgent necessity of speeding up the shop, or else providing more adequate facilities, or both.

PATERSON, N. J.—Vermeulen & Vreeland, Archs., Paterson, have plans in progress for factory for Garside Mfg. Co., of Paterson. Brick, mill construction, 2 stories, 75 × 100 ft. Engines, boilers, motors, generators, feed water heaters and foundry and machine shop equipments. Cost, $50,000.

YORK, PA.—The York Pattern Works, through W. H. Smyser, have taken out a building permit to erect a plant on Smyser St.

KINGSTON, PA.—PETER STIPP, of Scranton, Pa., has been awarded contract for silk mill to be erected in Kingston for Hess, Goldsmith & Co., 53 Greene St., New York. L. C. Holden, 1135 Broadway, New York, is Arch. Boilers, shafting, belting and heating apparatus.

BALTIMORE, MD.—The Chesapeake Bakery Co., Oak St., has awarded contract to B. W. & E. MINOR, 20 Clay St., for construction of an addition to its plant; one story, 30 × 80 ft. W. L. Minor is Arch., 20 Clay St.

KELFORD, N. C.—Geo. T. Parker, of Kelford, announces that about Nov. 1 he will be in the market for blowers, band saws, boring machines, resaw, pointers, etc.

ROCK HILL, S. C.—Syleecau Mfg. Co. will erect dry kiln, 16 × 28 ft., equipped with steam apparatus, and foundry, 30 × 40 ft., operated by electricity. The company will manufacture articles made of wood and iron. W. S. Lee, Jr., is Pres.

AUGUSTA, GA.—A. H. F. Timken, of Chicago, Ill., contemplates the establishment of plant here for manufacturing freight cars. Geo. Ness, Secy. Chamber of Commerce, can inform.

ST. MARTINSVILLE, GA.—J. J. Burdin & Bro. will rebuild plant recently burned. A fireproof building, 180 × 36 ft., will be erected and equipped for a capacity of 50,000 ft. of lumber and 100,000 shingles, with planing mill of 20,000 ft. capacity. Cost, $30,000.

AUGUSTA, GA.—The Augusta Mattress & Mfg. Co. is preparing plans for new buildings.

FRUITHURST, ALA.—The Fruithurst Excelsior Works will be in the market for excelsior factory supplies.

BIRMINGHAM, ALA.—F. G. Alexander contemplates establishing plant for the manufacture of wood alcohol, turpentine and byproducts from saw-mill refuse. No machinery has been purchased.

MOBILE, ALA.—John P. Morrel & Co. have purchased property at Water and St. Louis Sts., and will at once erect a cold storage plant

MEMPHIS, TENN.—Alsup & Woods, Archs., Randolph Bldg., have prepared plans and have taken figures for a four-story factory building for the Pelican Biscuit Co. Cost, $25,000.

LOUISVILLE, KY.—Falls City Brewing Co. has been organized by Ben Schrader, Theodore Evers, Ben Fihe, M. J. Hickey, Al. Hoffman of Louisville, E C. Tolle of Detroit, Mich., and F. R. Bathrick of Akron, O., to erect and operate brewery. Capital stock, $300,000.

PIQUA, O.—The contract for building new plant of Atlas Underwear Co. has been awarded to M. FRY, of Piqua.

CLEVELAND, O.—F. F. Hodges, Arch., Rose Bldg., has plans for factory building to be erected on West Side.

MARION, O.—Houghton & Merkel have plans and will erect a three-story carriage shop and repository, 58 × 75 ft. Cost, $10,000.

INDIANAPOLIS, IND.—The general contract for Parry Mfg. Co.'s factory and warehouse was awarded to CONRAD BENDER, of Indianapolis, at $62,000.

BOONVILLE, IND.—Harris & Shopbell, Archs., Evansville, Ind., have plans for a foundry for Will Weyerbacher, of Boonville.

BLUFFTON, IND.—Cuno Kibele, Arch., Bluffton, has plans for two-story laundry addition, 25 × 60 ft., for A. E. Sunier. Cost, $4,000. Bids will be received by owner in July.

EVANSVILLE, IND.—The Askin-Eskine flouring mill, recently destroyed by fire, will be rebuilt. Henry Askin, Pres.

RICHMOND, IND.—The Richmond Abattoir Co. has increased its capital stock from $10,000 to $100,000 and will receive bids for construction of a large addition to its plant as soon as plans are completed.

WATERLOO, IND.—Chris. Beyer, of Kendallville, will receive bids for construction of a two-story packing house on Van Vleek St. as soon as plans are completed. R. L. Hull is local agent.

VINCENNES, IND.—The Vincennes Window Glass Co. has ordered plans for improvements and additions. Bids will be in order soon.

CROSS PLAINS, IND.—The Cross Plains mill, recently destroyed by fire, will be rebuilt. The new mill will cost $15,000. Plans are now being prepared.

JACKSON, MICH.—Board of Trustees of Michigan State Prison will build a cold storage building, 70 × 30 ft. Alonzo Vincent is warden.

DETROIT, MICH.—Albert Kahn, Arch., 1117 Union Trust Bldg., is preparing plans for a six-story and basement power building, 170 × 138 ft. Cost, $150,000. Plans will be ready for bids about July 1.

DETROIT, MICH.—The Packard Motor Car Co., H. B. Joy, Gen. Mgr., is having plans prepared for a two-story addition, 250 × 52 ft., to its factory building.

BLISSFIELD, MICH.—JOHN SCHMIDT, Builders' Exchange, Toledo, O., has the contract to erect a large sugar plant at Blissfield for a Cleveland concern, at a cost of $100,000.

AURORA, ILL.—Plans are in progress for the enlargement of plant of Western Wheeled Scraper Co. The plans call for the erection of a brick and stone fireproof machine shop, 60 × 260 ft. Contract for steel trusses has been awarded to LOVE BROS.

CHICAGO, ILL.—Huehl & Schmid, Archs., 163 Randolph St., have made sketches for laundry and power house, to be erected on Lake St., for the Schriver Laundry Co. Brick, 2 stories, 72 × 176 ft. Cost, $20,000.

Hill & Woltersdorf, Archs., 70 La Salle St., are preparing plans for a machine shop and office, to be erected at Chicago Heights, for Kennicott Water Softener Co. Cost, $25,000.

W. L. Stebbins, Arch., 100 Jackson Blvd., is preparing plans for a foundry, to be erected at West 47th Ave., for Reidy Foundry Co. Brick and steel, 1 story, 80 × 50 ft. and 200 × 124 ft.

SPRINGFIELD, ILL.—The plant of the Springfield Boiler & Mfg. Co. was destroyed by fire, causing a loss of about $100,000.

CLINTON, IA.—John Morrell & Son, Archs., 314 Howe Block, are preparing plans for a three-story factory building, 104 × 130 ft., for the Anderson & Winter Mfg. Co. Cost, $20,000.

ST. PAUL, MINN.—R. McMILLAN & CO., 113 Fourth St., North Minneapolis, have secured the contract to build the Thiem & Co.'s manufacturing plant. Cost, $8,000.

FORT RILEY, KAN.—Bids are asked by the Quartermaster in charge of construction until June 8 for construction of a squadron blacksmith shop.

OMAHA, NEB.—The Omaha & Council Bluffs Street Ry. Co. awarded contract to ROCHEFORD & GOULD for building car repair shops at 26th and Lake Sts. Cost, $38,000.

JEFFERSON CITY, MO.—Contract for the erection of Giesecke-D'Oench-Hays shoe factory at Main and Linn Sts., has been awarded to H. I. WALLAU. It will be a five-story structure, 50 × 250 ft., to cost about $60,000. Miller & Opel are Archs. Previously reported.

FORT WORTH, TEX.—The Stockmen's Cotton Oil Co., of Fort Worth, will establish a large 180-ton mill here. J. P. Daggett is Pres.

TACOMA, WASH.—The Washington Mfg. Co. contemplates enlarging its plant.

MONCTON, N. B.—The Intercolonial Railway Co. will shortly invite tenders for new workshop, 150 × 658 ft., and new erecting shop containing 24 pits, also for building stores and offices. D. Pottinger is Gen. Mgr., Moncton.

SALMON RIVER, N. B.—The Bay Shore Lumber Co. will extend its mills here.

VANCOUVER, B. C.—Emil Guenther, Arch., has prepared plans for brewery for a Seattle syndicate. The plans call for a building to cost $100,000, which will be built in North Vancouver.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

PORTLAND CEMENT.—Mansfield, O.—Bids are asked by Board Public Service until 12 noon, June 1, for furnishing 2,000 bbls. Portland cement.

DITCH WORK.—Auburn, Ind.—Contract for deepening and widening Cedar Creek has been let to J. W. PEARL, Benton Harbor, Mich., for $20,814.

FILL.—St. Paul, Minn.—Bids are asked by Edw. G. Krahmer, County Audr., until June 5, for a fill and necessary pipes at Barnum Bridge, Edgerton St.

BOILER.—Fennimore, Wis.—Bids are asked by Dr. A. B. Bailey, Village Pres., until June 8 for a 66-in. by 16 ft. tubular boiler f. o. b. Fennimore.

DREDGING.—Norfolk, Va.—Bids are asked until June 19 for dredging Perquimans River, N. C. Capt. E. Eveleth Winslow, Engrs. (Advertised, Engineering News.)

WHARF EXTENSION.—New Carlisle, Que.—Bids are asked by Fred. Gelinas, Secy. Dept. Pub. Works, Ottawa, Ont., until June 9 for extension of wharf at this place.

DREDGING.—Wilmington, Del.—Bids are asked until June 20 for dredging in Raccoon Creek, N. J. Capt. C. A. F. Flagler, Engrs. (Advertised, Engineering News.)

DREDGING.—Wilmington, Del.—Bids are asked until June 21 for dredging in Alloway Creek, N. J. Capt. C. A. F. Flagler, Engrs. (Advertised, Engineering News.)

DREDGING. — Baltimore, Md.—Bids are asked until June 21 for dredging in Susquehanna River, Md. Lt.-Col. R. L. Hoxie, Engrs. (Advertised, Engineering News.)

DREDGING.—Wilmington, Del.—Bids are asked until June 19 for dredging in Tuckerton Creek, N. J. Capt. C. A. F. Flagler, Engrs. (Advertised, Engineering News.)

DREDGING.—Mobile, Ala.—Bids are asked until June 15 for dredging Mobile Bar, Ala., and Horn Island Pass, Miss. Major W. E. Craighill, Engrs. (Advertised, Engineering News.)

DREDGING. — Baltimore, Md.—Bids are asked until June 20 for dredging in Patapsco River and Chesapeake Bay, Md. Lt.-Col. R. L. Hoxie, Engrs. (Advertised, Engineering News.)

BREAKWATERS.—Port Stanley, Ont.—Bids are asked by Department Public Works, Fred. Gelinas, Secy., Otawa, Ont., until June 5 for constructing two breakwaters at this place.

FIRE ALARM SYSTEM.—Gouverneur, N. Y.—We are informed that this village is about to install a 12-battery electric fire alarm system. R. W. Smith, Clk. Village Board.

PORTLAND CEMENT.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, until June 2 for furnishing and delivering about 10,000 bbls. Portland cement.

PILES.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, Pier A, Battery Pl., until 2 p. m., May 26, for furnishing and delivering 1,000 piles, 80 to 85 ft. in length.

PIER.—New York, N. Y.—Commissioner of Docks has awarded contract for building new pier near foot of Jone's Lane, East River, to JOHN MONKS & SONS, 82 Beaver St., New York, for $36,800.

SEA WALL.—New York, N. Y.—Bids are asked until June 22 for building stone seawall at Governor's Island, New York Harbor. Lt.-Col. W. L. Marshall, Engrs. (Advertised, Engineering News.)

SUBWAY SYSTEM.—Peekskill, N. Y.—State Line Telephone Co. is reported to have awarded contract for putting in its subway system in this city to WM. G. GHERKY, 334 N. Broad St., Philadelphia, Pa.

DRAINAGE DITCH.—Stevens Point, Wis.—Contract for construction of about 28 miles of drainage ditch in Portage County is stated to have been let to KOCK & CORBETT, South Milwaukee, Wis., for about $20,000.

BREAKWATER.—Cleveland, O.—Bids are asked until June 19 for constructing shoreward end of West breakwater at Astabula Harbor, Ohio. Lt.-Col. Dan C. Kingman, Engrs. (Advertised, Engineering News.)

DREDGING. — Detroit, Mich.—Bids are asked until June 20 for dredging in St. Mary's River, at Bayfield Shoal and Entrance Angle to Middle Neebish. Lt.-Col. Chas. E. L. B. Davis, Engrs. (Advertised, Engineering News.)

LEVEE WORK.—West Memphis, Ark.—Bids are asked by St. Francis Levee Board, W. B. Miller, Pres., until June 21 for about 870,000 cu. yds. levee and canal work. H. N. Pharr, Ch. Engr., Randolph Bldg., Memphis, Tenn.

LEVEE WORK.—New Orleans, La.—Bids are asked until May 30 for constructing additional levees, repairing existing levees and filling in certain parts of the reservation at Fort St. Philip, La. Capt. B. T. Clayton, Q. M., U. S. A.

FREIGHT STEAMER.—Detroit, Mich.—THE GREAT LAKES ENGINEERING WORKS, of Detroit, has been awarded contract by the Globe Steamship Co. for a 10,000-ton freight steamer, 530 ft. long. It will cost $425,000.

CONDUIT WORK.—Boston, Mass.—Specifications for building Section 2 of the Boston marginal conduit may be seen at office of Engineering News, 220 Broadway, New York. Bids are asked until June 1, as advertised in Engineering News.

DREDGING PLANT.—Detroit, Mich.—Bids are asked until June 22 for hire of one dredging plant and one steam derrick boat for use in St. Mary's River, Michigan. Lt.-Col. Chas. E. L. B. Davis, Engrs. (Advertised, Engineering News.)

TERRACE WALL.—Holyoke, Mass.—Bids are asked by Board Park Commissioners, Charles E. Mackintosh, Chn., until June 12 for constructing concrete masonry terrace wall. James L. Tighe, Cy. Engr. (Advertised, Engineering News.)

DREDGING.—Norfolk, Va.—Bids are asked by Bureau Yards and Docks, Washington, D. C., until June 3 for about 25,000 cu. yds. dredging at Norfolk Navy Yard. Specifications may be seen at office of Engineering News, 220 Broadway, New York.

MISCELLANEOUS ARTICLES.—Tompkinsville, N. Y.—Bids are asked until June 21 for furnishing miscellaneous articles for the light house establishment for fiscal year ending June 30, 1906. Lt.-Col. W. T. Rossell, Engrs. (Advertised, Engineering News.)

WHARF ADDITION.—Governor's Island (New York, N. Y.).—Bids are asked until June 5 for constructing addition to wharf with railroad thereon, and warehouse on wharf at Fort Wood, New York Harbor. Traber Norman, Q. M., U. S. A.

TOWN SITE.—Mobile, Ala.—Burton J. Ashley, 6516 Normal Ave., Chicago, Ill., has just completed the designing and laying out of a town site (Irvington) for the Irvington Land Co., 20 miles below Mobile, on the New Orleans branch of the L. & N. R. R.

FERRY BOATS.—Washington, D. C.—Norfolk & Washington Steamboat Co. has awarded contract for two steel ferryboats to the HARLAN & HOLLINGSWORTH SHIPBUILDING CO., Wilmington, Del. The boats will cost about $140,000 each.

FIRE ALARM SYSTEM.—Rensselaer, N. Y.—Fire Commissioners have awarded contract for constructing fire alarm system to the following: GEORGE STEVENS CO., Boston, Mass.; MENEELY BELL CO., Troy, N. Y.; ALBANY BRASS & IRON CO., Albany, N. Y.

PIER WORK.—Cleveland, O.—Bids, as follows, were received by Lt.-Col. Dan. C. Kingman, Engrs., for reconstruction and repairing parts of west pier at Lorain Harbor, O.: L. P. & J. A. Smith Co., Cleveland, O., $57,405; Patrick Keehane, Fayetteville, N. Y., $49,254.

BREAKWATER.—Cleveland, O.—We are advised that Edward M. Graves, of Indianapolis, Ind., was lowest bidder, at $45,150, for filling with large riprap along lake face of west breakwater, Cleveland Harbor. Bids were received by Lieut.-Col. Dan. C. Kingman on May 6.

DREDGING.—New London, Conn.—Bid of John and Joseph McSpirit, Jersey City, N. J., of 13.8 cts. per cu. yd., for about 55,000 cu. yds. dredging in Milford Harbor, Conn., has been recommended for acceptance. Bids were received May 20 by Lt.-Col. Chas. F. Powell, U. S. Engrs.

FERRY STRUCTURES, ETC.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, until 2 p. m., May 29, for furnishing labor and materials required for preparing for and repairing, altering and extending present ferry structures at foot of Whitehall St., East River, and for dredging thereat.

BOILERS, ETC.—Baltimore, Md.—Board of Awards has rejected all bids for installing new boilers in ice boat "F. C. Latrobe" and for repairing afterpart of the boat. N. H. Hutton, Harbor Engr., was authorized to prepare new specifications to bring the bids within the $40,000 appropriation available for the work.

BREAKWATER EXTENSION. — Buffalo, N. Y.—Following bids were received May 20 by Lt.-Col. H. M. Adams, Engrs., for breakwater extension at Cape Vincent, N. Y.: Buffalo Dredging Co., Buffalo, N. Y., $37,601; John Henrick, Oswego, N. Y., $28,808 (recommended for acceptance); Lake Erie Dredging Co., Buffalo, N. Y., $39,690.

BREAKWATER REPAIR.—Cleveland, O.—Following bids were received May 6 by Lt.-Col. Dan. C. Kingman, Engrs., for constructing shore end of west breakwater at Fairport Harbor, O.: L. P. & J. A. Smith Co., Cleveland, O., $163,320; Federal Construction Co., New York, $154,350; Buffalo Dredging Co., Buffalo, N. Y., $176,325.

PIER WORK.—Baltimore, Md.—Bids were to have been opened May 24 by Board of Awards, E. Clay Timanus, Pres., for construction of stone and timber bulkhead to enclose and form Pier No. 4. We are now informed that the work will be readvertised because of a legal difficulty which prevents the turning over of state property needed for the pier.

DREDGING.—Gladstone, Mich.—Following bids were received May 16 at Milwaukee, Wis., by Major J. G. Warren, U. S. Engrs., for 85,000 cu. yds. dredging at Gladstone Harbor: Samuel O. Dixon, Milwaukee, Wis., $11,475; Great Lakes Dredge & Dock Co., Chicago, Ill., $14,025; Greiling Bros., Green Bay, Wis., $11,262; Joseph Welter, Sturgeon Bay, Wis., $11,050.

BREAKWATER REPAIR.—Cleveland, O.—Following bids were received May 6 by Lt.-Col. Dan. C. Kingman, Engrs., for repairing shore end of west breakwater at Cleveland Harbor: Buffalo Dredging Co., Buffalo, N. Y., $89,964; L. P. & J. A. Smith Co., Cleveland, O., $85,863; Hunkin Bros. Construction Co., Cleveland, O., $82,275; Edward M. Graves, Indianapolis, Ind., $102,630.

EXPLOSIVES.—Washington, D. C.—Following bids were received by Isthmian Canal Commission May 18 for powder, fuse, caps, tape, detonators and batteries: Laflin & Rand Powder Co., 170 Broadway, New York, $51,350, alternative bid, $44,380; Star Electric Fuse Works, Wilkesbarre, Pa., 30-ft. detonators, $1,199.85; 20-ft., $749.85; 16-ft., $1,074.75; 10-ft., $679.80. John S. Miller, Chicago, Ill., $48,440 for nitrate of soda. E. I. Du Pont Co., Wilmington, Del., $45,957.

DITCH WORK.—Havana, Ill.—Contracts for excavation from ditches of Mason and Tazewell Special Drainage District, bids received May 19, have been awarded as follows: R. H. McWILLIAMS, Mattoon, Ill., 156,899 cu. yds., at 15½ cts., $24,307; JOSEPH LEWIS, Atwood, Ill., 34,085 cu. yds., at 24 cts., 31,435 cu. yds., at 27 cts., and 22,933 cu. yds. at 26 cts., $22,644. All excavation is from old ditches. Hobart Hamilton, Engr. District, Petersburg, Ill.

PIER WORK.—Buffalo, N. Y.—Following bids were received May 22 by Lt.-Col. H. M. Adams, Engrs., for extension of south pier and for concrete superstructure on north pier at Erie, Pa.: Wm. P. Donnelly, Buffalo, N. Y., $92,192; Continental Contracting & Engineering Co., Buffalo, N. Y., $86,015; L. P. & J. A. Smith Co., Cleveland, O., $89,192; Lake Erie Dredging Co., Buffalo, N. Y., $89,820; Wm. H. Shelton, Dunkirk, N. Y., $66,127; A. F. Chapman & Co., Buffalo, N. Y., $88,557. Itemized bids will be given under Contract Prices.

ROCK EXCAVATION.—Chicago, Ill.—Following bids were received May 15 by Lt.-Col. Wm. H. Bixby, U. S. Engrs., for 61,550 cu. yds. rock excavation in Calumet River: Buffalo Dredging Co., Buffalo, N. Y., $183,419; The L. P. & J. A. Smith Co., Cleveland, O., $196,960; The Fitz Simons & Connell Co., Chicago, Ill., $181,572; Samuel O. Dixon, Milwaukee, Wis., $201,268; Great Lakes Dredge & Dock Co., Chicago, Ill., $138,487. Add to the above amounts the cost of excavating, etc., 150,000 cu. yds. (estimated) soft material at 20 cts. per cu. yd., or $30,000.

CONCRETE SUPERSTRUCTURE. — Milwaukee, Wis.—Bids were received as follows May 16 by Major J. G. Warren, U. S. Engrs., for construction of concrete superstructure on breakwater and on North Harbor pier: Powell & Mitchell, Marquette, Mich., $129,698; Bennett & Schnorbach, Muskegon, Mich., $137,689; John E. Hathaway, Milwaukee, Wis., $131,150; Rudolph S. Blome Co., Chicago, Ill., $132,082; Edward Gillen, Racine, Wis., $129,336; Adolph F. Bues, Milwaukee, Wis., $118,685; Great Lakes Dredge & Dock Co., Chicago, Ill., $129,838; William H. Gillen, Milwaukee, Wis., $111,696.

HARBOR IMPROVEMENT. — Waukegan, Ill.—Following bids were received at Milwaukee, Wis., May 16 by Major J. G. Warren, U. S. Engrs., for removing old piers and building pile piers and timber superstructure at Waukegan: Bennett & Schnorbach, Muskegon, Mich., $89,476.02 using white pine, $88,859.42 using Douglas or Oregon fir, Southern or Norway pine. Edward Gillen, Racine, Wis., $71,110.87 using Douglas or Oregon fir timber. Great Lakes Dredge & Dock Co. Chicago, Ill., $69,633.76 using white pine, $68,400.56 using Douglas or Oregon fir or Southern or Norway pine timber.

SWITCH BOARDS.—Salt Lake City, Utah.—We are informed that the Rocky Mountain Bell Telephone Co. will install common battery switchboards in the following cities: Provo, Logan, Murray, Bingham Junction, Huntsville, Garland, Plain City, Park City, North Ogden, in Utah; Pocatello, Idaho Falls, Twin Falls City, in Idaho; Helena, Billings, Missoula, Bozeman, Anaconda, in Montana. Each exchange carries also quite a lot of cable work and considerable of this work is being done at other points. Many farmers' lines are being constructed, also additional toll lines. A. S. Peters is Engr.

EARTH SPREADERS, ETC.—Washington, D. C.—Following bids were received by Isthmian Canal Commission May 10 for furnishing (1) 60-ton unloader with steel car, two 25-ton unloaders with steel cars, two extra flexible steam connections, 2,000 ft. wire cable, 24 extra Crosby clips; (2) two left-hand unloader plows, three right-hand unloader plows; (3) three earth spreaders for use on a track having a 5-ft. gage: Marion Steam Shovel Co., Marion, O., (2) $4,325. Mann-McCann Co., 1709 Railway Exchange Bldg., Chicago, Ill., (3) $14,607. Henry H. Meyer, 110 South Howard St., Baltimore, Md. (1) $23,783.

LOCOMOTIVE CRANES.—Washington, D. C.—Following bids were received by Isthmian Canal Commission May 16 for (1) one 10-ton and (2) one 20-ton locomotive crane: Wellman-Seaver-Morgan Co., 42 Broadway, New York, (1) $8,400; Industrial Works, Bay City, Mich., (1) $6,995, and crane with cap with 14 tons at 15 ft. as per letter, $9,162, (2) $8,112; Browning Engineering Co., Park Row Bldg., New York, (1) $7,315, with $857 additional for packing, insurance, freight, traveling expenses, 20 days, salaries, fares, etc., making a total of $8,172, (2) $7,775 with $885 additional for packing, insurance, freight, traveling expenses, salaries, etc.; making a total of $8,660; American Hoist & Derrick Co., St. Paul, Minn., (1) $9,900, add $100 for lagging boiler, delivery within 60 days, (2) $6,600, add $100 for lagging boiler, delivery in 20 days; Brown Hoisting Machinery Co., 26 Cortlandt St., New York, (1) $9,190, (2) $11,285.

EXCAVATION WORK.—Washington, D. C.—As stated in our advertising columns, the Isthmian Canal Commission is advertising for bids to be opened June 15 for excavating entrance and inner harbor at Colon, Canal Zone. The contractor will be required to commence work within 90 days after date of notification of approval of the contract by the Chief Engineer of the Commission. The work to be done consists of:

(a) A navigation channel 500 ft. wide at the bottom and 40, 35 or 30 ft. deep below mean low water, with side slopes of two to one, beginning at a point of the minus 40, 35 or 30-ft. contour line in front of Limon Bay and ending at Cristobal Point in the mouth of the inner harbor, which is described in section (b) of this article.

(b) Of an inner harbor extending from Cristobal Point for such distance as may hereafter be determined, along the axis of the existing canal, with a bottom width of 500 ft. at the entrance, thence widening to 600 ft. at station 22, and to 1,000 ft. at station 51, at a depth of 40, 35 or 30 ft. below mean low water. Or an extension to this inner harbor from station 51 to station 100, with a bottom width of 1,000 ft., at a depth of 40, 35 or 30 ft. below mean low water. The Isthmian Canal Commission reserves the decision of letting the work of excavation of the inner harbor and entrance channel thereto, on the 40, 35 or 30-ft. plan. Also of excavating the inner harbor from station 0 to station 51, or to its full length from station 0 to station 100. Intending contractors are invited to submit bids for the different depths of 40, 35 or 30 ft., as well as for the two sections (station 0 to station 51 and station 51 to 100), and also for the whole harbor, station 0 to station 100.

(c) A drainage channel along one of the avenues in the town of Colon which channel is to be approximately 7,000 ft. long, 10 ft. wide at the bottom and 8 ft. deep at mean low water, connecting at the north end with the open sea, and at the south end with the Boca Grande. The slopes to be vertical in coral rock, and two to one in sand and mud. The approximate quantity of this work will be 50,000 cu. yds.

(d) Building of a dry retaining wall inside the wharf line along a certain portion of the wharfage, said wall to be built of coral rock to be taken from the harbor excavation.

The slopes of the excavation shall be made as a general rule: Vertical in coral rock and hard green indurated clay; 1¼ to 1 in stiff clay; 2 to 1 in sand and mud. The slope to be adopted, however, shall be determined in each individual case by the engineer in charge.

FOREIGN CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

AIR PLANT.—South Australia.—A complete compressed air plant is about to be installed at the Locomotive Works, Islington, S. A. The pneumatic tools will probably all be of American manufacture.

RAILWAY.—Portuguese East Africa.—A decree has been published authorizing the government to raise a loan of about $3,015,625 for the construction of a railway from the port of Mossamedes to the plain of Chella, in the province of Angola.

RAILWAY.—French Congo.—The French Colonial Minister has appointed a committee of engineers, which sail from Bordeaux May 15, to carry out surveys for the construction of a railway to connect Libreville with the river Congo. The length of the proposed line is estimated at about 750 kilometers.

HOPPER DREDGE.—Spain.—Tenders will be opened at office of Secretary Port Works Board, Almeria, about June 25, for the provision of a hopper carrier dredge with pump, having a capacity in its buckets of 275 cubic meters, with 300 meters of floating tubing. The dredge is to cost about $135,705.

RAILROAD.—Madagascar.—The President of the French Republic has promulgated the text of a law authorizing the Governor-General of Madagascar to negotiate a loan of not to exceed $2,895,000, the proceeds of which are to be used exclusively in the construction of a railroad from Tananarivo to the east coast of the island.

MARITIME TERMINUS.—Africa.—G. Bie Ravndal, U. S. Consul at Beirut, Syria, reports that a sum approaching $1,000,000 has been provided for the creation of a maritime terminus for the Suakin-Atbara Railway at Sheikh el Barghout, a place some 30 miles north of Suakin. The railroad will, it is hoped, be completed early in 1906.

RAILWAY.—Bulgaria.—Bulgarian Ministry of Public Works, Sofia, Bulgaria, has invited tenders for the construction of a line of railway from Tirnova-Trevna-Barouchtitza, of a total length of 230 miles; also a line from Radomir to Kustendil and the Turkish frontier of a total length of about 340 miles. Bids for the first line will be received up to June 2, and for the second line until June 9.

ELECTRIC RAILWAY.—Peru.—A. L. M. Gottschalk, U. S. Consul at Callao, Peru, reports that an association of Lima capitalists has been formed, with a capital of $364,987, to build and operate a second line of electric cars between Lima and Barranco, Miraflores and Chorrillos. It is also reported on good authority that a second new line of railroad will soon be built between Lima and Callao.

DREDGE AND BARGE. — England. — Tenders are wanted by the Port and Harbor Commission of Hartlepool, until June 15, for the construction of a self-propelling barge-loading dredger, capable of lifting 600 tons per hour and of dredging to a depth of 40 ft. below water level; also for the construction of a twin-screw steam hopper barge (hopper capacity 500 tons, speed nine knots loaded). J. D. Howkins, Engr., Hartlepool.

MOTOR CAR.—South Australia.—The South Australian Railways have ordered from Kitson & Co., Leeds, England, a railway steam motor car to carry 9 first-class and 13 second-class passengers. The car is to be fitted with Westinghouse brake and Stone's electric light. The gage is 3 ft. 6 ins. and the speed is to be from 15 to 20 miles per hour. If this new departure proves successful a considerable number of such motor cars will be required.

SAW MILLS.—Liberia.—Ernest Lyon, U. S. Consul-General at Monrovia, Liberia, reports that the forestry resources of that country offer an inviting field for a lucrative business in hard woods. The virgin forests consist of woods of great commercial value, and there are ample water facilities for saw mills. There are no efficient saw mills in operation at present. Mr. Lyon states that ex-U. S. Consul at Loanda, Mr. Downing, is now in Liberia for the purpose of securing a concession to develop the timber industry in the interest of American capitalists.

AQUEDUCT.—Italy.—An association has been formed between the towns of Girgenti, Favara, Porto Emoedocle, Aragona, Raffadali, Comitini Sant' Angelo and San Biagio, under the presidency of the Com. V. Consiglio, at Girgenti, for the construction of an aqueduct of masonry and iron tubing which shall lead the Gragotta spring at S. Stefano, Qu'squina Bivona district, to the places above mentioned. The committee has invited tenders for the execution of the work, which is estimated to cost $405,640; tenders must be for less than the estimated cost, and are to be deposited before June 10 with the President.

RIVER NAVIGATION.—Italy.—A commission recently appointed by the Italian Government to study a plan of river navigation along the Po and its confluents between Venice and Milan, has arrived at the following conclusions, viz.: To establish a direct service for 397 kiloms., with 600-ton flat boats from Venice to Milan, through Brondola, Cavanella, Adda, Pizzighettone and Lodi; to group and connect all the branch lines to the principal one and to the lakes in a uniform manner, so as to cover a distance of 3,410 kiloms. The expenditure to be incurred in excavating and improving the services has been computed to be about $23,-600,000.

PORT CONCESSION. — Argentina. — The Argentine Harbor Railway Co., Ltd., has been organized in London, England, to work the concession of the Samborombon port. The capital subscribed for the first section of the work is $1,250,000 and $4,000,000 in debentures; total capital is $35,000,000. The contract was signed March 20 by Messrs. Castano, Casares and Villanueva, acting as witnesses. The chairman of the Board of Directors is Captain Heath, R. N., and the Board comprises Mr. Alfred Bull, chairman of the Mines Banking Corporation; Mr. Robert Turner, shipbuilder; Mr. Herbert Borel, representative of the Hamburg-American Co.; Mr. Emelio Casares, and the chairman of the Bank of Scotland.

RAILWAY.—Argentina.—A company, with a capital of $50,000,000, has been formed in Paris, France, and has taken up the De Bruyn-Otamendi railway concession for a net work of narrow gaged lines. The concession is divided into five sections, as follows: North Section, Buenos Aires to Rosario; West Section, Buenos Aires to General Villegas; Southwest Section, junction with last named to intersection of Western Railway between La Zaula and Carahué; South Section, Buenos Aires to Bahia Blanca; East Section, from West Section to La Plata, and the following branches: Salto to the Rio Porana via Arrecifes, and from Salto to a junction with the West Section via Chacabuco and Bragrado, from Mercedes to Campana, from Pergamin to Rosario and Vedia, from Chivilcoy to 25 de Mayo, from South-west Section to Bolivar, and in the South Section, branches to Lobos, General Alvear, Tapalqué, Olavarria, Jaurez Tres Arroyos, and Puerto Militar. The negotiation was conducted under the auspices of the Banque des Pays-Bas, Paris Bank and Societé Générale Belge. The necessary payment of the Argentine Government of $200,-000, guaranteeing the completion of the work, has been made.

RAILWAY WORK, ETC.—Ecuador.—We are informed that there is considerable work projected in railroad building, street car lines, electrical and other improvements (municipal) throughout Ecuador. It is probable that some of these improvements will be realized, especially in the line of municipal improvements. The building of the Guayaquil & Quito Ry. has given a great impetus to sentiment in regard to railroad building, and the mere fact that attempts are being made to build railroads in many parts of the Republic, indicates a great awakening of public sentiment to the necessity of transportation facilities, which will eventually result in [illegible] country gaining such facilities for it[illegible] [illegible]terial development. The only public im[illegible]ements which have reached a point pra[illegible]lly guaranteeing their completion are a[illegible]ensive electric lighting plant for the City [illegible] Riobamba and one for the City of Gua[illegible]il; both are French plants and both a[illegible]out ready to be placed in operation. T[illegible]overnment of Ecuador has recently brou[illegible]t a party of engineers from the Unite[illegible] to survey a railway route from the C[illegible] Ambato, via Banos, to the Curaray Riv[illegible]th a view to opening up and developing [illegible]riental possessions. The idea is to car[illegible]e road down the Ambato, Patate and Pa[illegible] Rivers, and then to cut across the di[illegible] between the Pastaza and Curaray Rive[illegible] the latter. Such a road, if built, wou[illegible] a feeder of the Guayaquil & Quito Ry [illegible]hich passes through the City of Ambato.

RAILWAYS, ETC.—Peru [illegible] are informed that work is being [illegible] pushed on the extension of the railway [illegible] Oroya to Hunancayo and the grading [illegible] nearly complete on first section. The [illegible] follows the bank of the River Mantaro a[illegible] will open up a fine belt of agricultural a[illegible] mineral land, and give communication bet[illegible] the coast and numerous inland towns. [illegible]E PERUVIAN CORPORATION of Lond[illegible] England, is the contractor for the first se[illegible]. On the extension of the Arequipa Ry [illegible] Sicuani to Cuzco, 50 kilometers of gr[illegible] are finished, and the work is being r[illegible]ly pushed. This line will be 150 kilom[illegible] in length, 40 of which are of light work. [illegible] will cross the Vilcanota River three tim[illegible] with steel bridges of 35 meters span. The maximum gradient will be 2.4%, and min[illegible]um curvature 143 meters radius. The first portion has been contracted for at £2,[illegible] per kilometer. The line will form part of the course of the projected Pan-American Railway. It runs through a partly-populated region of great resource. The surveys are finished and construction will be begun when contracts are let for an important line of railway from Arica (Peru) to La Paz (Bolivia). This line will be 478 kilometers in length and will give outlet from the Bolivian interior to the Pacific coast port of Tacna, in Peru, from which point the line is already in operation to Arica. It is suggested to construct a portion of this line, where it crosses the Cordillera, a chain of the Andes Mountains, as a rack-railway. A line is projected from Arica, Peru, to Santiago, Chili, following the coast in its greater part. This will be a long and important piece of work. Work is being carried out upon the breakwater at the Port of Mollendo, Peru, by the PERUVIAN CORPORATION, of London, under contract with the Peruvian government. This port is the terminus of the Arequipa, or southern railway of Peru, and gives access to the region of lake Titicaca, and to Puno, Cuzco, etc. The new breakwater and wharves will greatly facilitate shipping at that port. A company has been formed in London and work is about to be undertaken upon the important railway from the port of Chimbote, Peru, to the interior towns in the valley of Huaylas. There is a good deal of tunneling to be done, and some steel bridges will be required.

READERS' WANTS

If any one is in the market for any engineering or contracting supplies, the first thing to do is to refer to our advertising pages, but if the buyer cannot find what he wants we particularly ask that he notify us at once and we will inform the proper parties without cost to the inquirer. A copy of ENGINEERING NEWS BUYERS' GUIDE will be mailed to any one upon application. This paper will always appreciate any news notes regarding public, or important private work, and will be pleased to receive detailed items. Requests to hold names will be complied with in every case. Do not fail to write our advertisers or us.

VARNISH AND PAINT.—Egypt.—G. Bonnice, of Cairo, is in the market for the above.

DRY-KILN.—Lake City, Fla.—The Lake City Lumber Co. is in the market for a 60 × 30 ft. dry-kiln.

100-HP. BOILER.—New Orleans, La.—E. W. Holden, 1018 Hennen Bldg., is in the market for the above.

PAINT MACHINERY.—Birmingham, Ala.—The Rankin-Tuck Paint Co. is in the market for new paint machinery.

CONCRETE BUILDING BLOCK MACHINE.—Pickens, S. C.—L. H. Grandy, of Pickens, is in the market for the above.

ACETYLENE GAS LIGHTING.—Memphis, Tenn.—J. Hansler, 120 Monroe St., wants prices on acetylene gas lighting plants.

BUILDING BRICK.—Roanoke, Va.—Watt, Rettew & Clay are in the market for about 75,000 pressed brick for a new building.

LANTERNS, LAMPS, ELECTRIC FIXTURES, ETC.—Gibraltar.—Richard Parady & Co., Wetterfort St., Gibraltar, are in the market for the above.

ELECTRICAL SUPPLIES.—Petros, Tenn.—The Brushy Mountain Coal Mines, W. T. Murray, Gen. Mgr., is understood to be in the market for motors, etc.

HARDWARE, PLUMBING, ETC.—Dutch Guiana.—J. M. Headman, of Paramaribo, D. G., So. Am., is in the market for the above, according to reports.

COTTON MILL MACHINERY.—Colombia, So. Am.—F. Bouckelmann, of Muller & Co., Barranquilla, wishes to secure catalogues from firms making cotton mill machinery.

SAFETY STAIR TREADS.—New York, N. Y.—J. H. Stewart, As t. Engr., Public Works, 13 Park Row, writes us that he wants the names of firms supplying safety stair treads.

WOODWORKING MACHINERY.—Houston, Tex.—The Southern Fuel Co., 207 Main St., is in the market for wood working machinery, as is also the Dothan Variety Works, of Dothan, Ala.

LOCOMOTIVE CRANES.—Chicago.—We are informed that a reader is in the market for one or more locomotive cranes from 2 to 30 tons capacity. Address "Cranes," 1636 Monadnock, Chicago.

BRICK MAKING MACHINERY.—Boulder, Colo.—I. H. Yancy, Asst. Secy. Colo.-Tex. Mining, Milling & Brick Co., Boulder, and B. A. Fesperman, Rockwell, N. C., are reported in the market for the above.

SANITARY FLOORING COMPOSITION.—New York.—Behan & Cavanagh, Builders, Mercantile Bldg., 4th Ave. and 23d St., write us that they want the addresses of manufacturers of sanitary floor composition.

GAS AND STEAM ENGINES.—Dexter, N. Y.—C. C. Burns, Contractor, of Watertown, N. Y., writes us that he wants the names of manufacturers of gas and steam engines of about 200-HP. to be installed at the electric plant at Dexter, N. Y.

BRICK AND ASPHALT PAVING.—Shawnee, Okla.—J. R. Burnham, C. E., Shawnee, writes us that he wants all possible data relating to brick and asphalt paving, as Shawnee is planning considerable of this kind of work during the season.

REPAIRING ENGINES AND BOILERS.—Lancaster, Pa.—Frank J. McDewitt, M. E., of Lancaster, writes us that he wishes to learn the names of a few firms in or near New York City who do a general repair business of engines and boilers.

RAILWAY EQUIPMENT.—It is stated that railway supplies will soon be wanted by the Gibbes Machinery Co., 804 W. Gervais St., Columbia, S. C.; W. W. Robertson & Co., Citizens' Bank Bldg., Norfolk, Va.; and the A., B. & A. R. R., of Oglethorpe, Ga.

GASOLINE MOTOR CARS.—Magnolia, Miss.—X. A. Kramer & Co., Engrs., of Magnolia, writes us that they are interested in an interurban railway proposition, and will consider the uses of gasoline motor cars. It is desired to get into correspondence with manufacturers of motor cars.

WATER-WORKS SUPPLIES.—Dunnellon, Fla.—T. W. Thompson, Lock Box 141, writes us that he is in the market for the following: One 40,000-gallon tank to be elevated 100 ft., one 6-in. pump, one gasoline engine to drive pump, 6-in. and 4-in. mains (cast or spiral), fittings, valves, hydrants, corporation cocks, meters, etc.

OLD BOILER SHELLS, ETC.—Indianapolis, Ind.—The Block Bridge & Culvert Co., 108 North Delaware St., writes us that it has an outlet for a considerable number of old boiler shells and boiler tubes in sizes 12 to 30 ins. in diameter and 14 to 24 ft. in length, for road culverts, and to be put in touch with concerns from whom it can buy at first hand.

ENGINES, BOILERS, ETC.—Fairmont, W. Va.—G. E. Suck, Treas. Brady Construction Co., Fairmont, writes us that he has lately become interested in the promotion of a new concern for the manufacture of enameled sanitary ware, and that he will very soon be in the market for engines, boilers, compressors, blowers, sand blast machines, cleaning barrels, powder mills, wood working machinery, emery wheels, flexible shafting, swinging grinders, pan rolls, drill presses, planers, lathes, etc., and would be pleased to correspond with the manufacturers of same.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

The names of parties awarded contracts are printed in capital letters.

TUNNEL.—Boston, Mass.—Following bids were received May 16 by Boston Transit Commission for building Sec. 5 of Washington St. tunnel, the contract being let to COLEMAN BROS., 15 Court Sq., Boston: (1) H. Gore & Co., Boston; (2) Metropolitan Contracting Co., Boston; (3) Jas. J. Coughlan Contracting Co., Boston; (4) Gow & Palmer, Boston; (5) Hugh Nawn Contracting Co., Boston; (6) Manufacturers Contracting Co., Wilmington, Del.; (7) Coleman Bros., Boston:

Bids received at Boston, Mass., May 16, 1905, by Boston Transit Commission, for Building Section 5 of Washington Street Tunnel.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Excavation, concrete sheeting, etc.	52,000 cu. yds.	$6.50	$4.95	$6.50	$6.00	$5.50	$5.15	$5.25
Furnishing and placing concrete	11,000 "	14.00	10.90	13.00	14.50	11.00	12.50	11.00
Placing concrete	11,000 "	9.00	6.25	8.00	9.00	7.50	7.50	6.75
Furnishing and placing concrete around steel beams	500 "	15.00	15.00	15.00	16.00	15.00	15.00	14.00
Placing concrete around steel beams	500 "	10.00	7.00	10.00	11.00	10.50	10.00	9.50
Brick masonry for manholes, etc.	100 "	20.00	15.00	20.00	18.00	20.00	18.00	20.00
Laying 24-in. vitrified sewer	540 lin. ft.	.75	1.50	1.50	1.00	2.00	1.00	1.50
Laying 18-in. vitrified sewer	170 "	.65	1.50	1.00	.80	1.00	1.00	1.00
Laying 15-in. vitrified sewer	1,050 "	.50	1.50	1.00	.60	1.00	.75	.75
Laying 12-in. vitrified sewer	400 "	.75	1.50	.50	.50	1.00	.75	.60
Laying 6-in. and 8-in. vitrified sewer	400 "	.20	1.50	.40	.30	1.00	.30	.40
Laying 3-in. and 4-in. vitrified pipe	300 "	.15	1.00	.40	.20	.70	.20	.20
Setting in place and securing steel and iron weighing less than 6 lbs.	300 tons	20.00	15.00	20.00	18.00	12.00	14.00	20.00
Setting in place and securing steel and iron weighing 6 lbs. or more	250 "	20.00	18.00	18.00	15.00	15.00	12.00	15.00
Furnish, prepare and apply coating of Portland cement mortar	3,000 sq. yds.	.75	.50	.75	.75	.60	.45	.50
Grout	100 cu. yds.	35.00	25.00	33.00	25.00	25.00	25.00	25.00
Waterproof coating of pitch or asphalt	5,000 sq. yds.	.40	.50	.50	.50	.30	.40	.40
Waterproof coating of tarred felt, pitch, etc.	40,000 "	.20	.29	.25	.25	.20	.20	.20
Underpinning		111,000	92,000	92,000	55,000	82,000	80,000	55,000
Totals		$583,095 640,595	$454,390 509,540	$556,060 613,560	$501,386 564,386	$482,210 522,960	$460,127 517,627	$434,977 483,977

DREDGING.—Newport, R. I.—Following bids were received May 15, by Lt.-Col. J. H. Willard, U. S. Engrs., for dredging Providence River and Harbor: J. S. Packard Dredging Co., Providence, R. I., 8.97 cts.; Henry DuBois Sons Co., New York, 11 cts.; The International Contracting Co., Whitehall Bldg., New York, 9.87 cts.; R. G. Packard Co., 130 Pearl St., New York, 11 cts.; Charles W. Eaton, Haverhill, Mass., 12 cts.; Morris & Cummings Dredging Co., 17 State St., New York, 10.5 cts.; Columbia Dredging Co., 64 Broad St., New York, 8.45 cts. The amount available is $100,000, and the approximate amount to be expended under this contract is $400,000.

*SEWERS.—New Orleans, La.—Bids were received April 18 by the Sewerage and Water Board of New Orleans, Geo. G. Earl, Gen. Supt., for the construction of four sections of sewers, the contracts being awarded as follows: Contracts Q and R, BLACK & LAIRD, Birmingham, Ala., at $88,756 and $189,293; Contract S, GID. R. TURNER, New Orleans, La., $118,627; Contract T, IRWIN BROS., New Orleans, La., $96,942. The itemized bids received on Contract R were as follows; (1) Black & Laird; (2) A. L. Patterson & Co., Macon, Ga.; (3) Gid. R. Turner; (4) Irwin Bros.; (5) Weatherford & Cary Bros., Memphis, Tenn.; (6) Suderman, Dolson & Co., Houston, Tex.; (7) McGovern Construction Co., Trenton, N. J.:

Bids received at New Orleans, La., April 18, 1905, by the Sewerage and Water Board of New Orleans, Geo. G. Earl, Gen. Supt., on Work Under Contracts Q and R, for the Construction of Four Sections of Sewers.

Items.	Quantity.	(1)	(2)	(3)	(4)	(5)	(3)	(7)
30-in. pipe sewers, 12—14 ft. deep....	1,000 feet	$5.50	$5.70	$8.25	$6.00	$7.60	$7.60	$9.00
30-in. double strength pipe sewers, 14—16 "	1,000 "	5.75	6.50	8.60	7.00	8.90	8.50	9.50
27-in. " 12—14 "	900 "	4.90	5.22	7.90	5.50	7.00	7.35	7.00
27-in. double strength " 14—16 "	900 "	5.50	5.83	8.50	6.00	7.90	8.00	9.00
24-in. " 12—14 "	400 "	3.90	4.10	6.00	4.80	5.80	5.20	6.50
21-in. " 10—12 "	700 "	3.25	3.47	4.25	3.30	4.30	4.25	6.00
21-in. " 12—14 "	2,700 "	3.65	3.83	4.50	4.00	4.70	5.20	6.50
18-in. " 10—12 "	1,800 "	2.90	3.04	2.90	3.00	3.80	3.40	....
18-in. " 12—14 "	800 "	8.20	3.28	4.00	3.50	4.30	4.00	4.00
15-in. " 8—10 "	400 "	2.05	1.76	1.80	2.00	2.00	3.20	3.50
15-in. " 10—12 "	1,400 "	2.20	2.10	2.10	2.30	2.30	3.20	4.00
12-in. " 8—10 "	400 "	1.70	1.16	1.55	1.75	1.50	1.85	2.25
12-in. " 10—12 "	300 "	1.80	1.57	1.75	2.00	1.80	2.30	2.50
10-in. " 8—10 "	750 "	1.25	1.08	1.25	1.10	1.35	1.50	2.00
10-in. " 10—12 "	1,000 "	1.40	1.50	1.50	1.50	1.60	2.00	2.50
8-in. " 0—6 "	23,700 "	.57	.59	.58	.70	.70	.58	.75
8-in. " 6—8 "	71,700 "	.70	.65	.67	.80	.75	.80	.85
8-in. " 8—10 "	21,700 "	.90	1.02	.95	.90	1.00	1.20	1.50
8-in. " 10—12 "	1,200 "	1.00	1.38	1.40	1.10	1.50	1.75	1.75
6-in. house connections....................	2,500 "	.40	.37	.60	.50	.50	.95	.50
6-in. stand pipe....................	1,100 "	.20	.20	.20	.20	.20	.20	.20
Manhole complete, under 6 ft. in depth....	24	45.00	50.00	35.00	40.00	45.00	40.00	40.00
" over 6 ft. and under 8 ft. in depth..	84	50.00	54.00	42.00	50.00	50.00	45.00	45.00
" over 8 ft. and under 10 ft. in depth	89	60.00	63.00	52.00	60.00	60.00	50.00	50.00
" over 10 ft. and under 12 ft. in depth	23	75.00	70.00	65.00	75.00	75.00	55.00	55.00
" 12 ft. in depth....................	29	75.00	90.00	70.00	80.00	80.00	65.00	60.00
Flush tank....................	110	55.00	66.00	42.00	60.00	50.00	60.00	75.00
5-in. flushing siphon furnished....................	110	15.50	15.50	15.00	15.00	15.00	18.00	15.00
Cubic yard extra concrete, grade A....................	150 cu. yds.	9.00	10.00	9.00	5.00	10.00	10.00	8.00
" " " B....................	50 "	8.50	6.00	8.40	4.80	9.00	9.00	7.00
" " " C....................	50 "	8.00	4.00	5.50	4.80	8.00	6.00	6.00
" " brickwork laid in Portland cement...	200 "	12.00	18.00	10.00	6.00	13.00	12 50	10.00
" " excavation under 16 ft. in depth.....	100 "	1.00	1.50	1.40	1.50	1.00	1.75	5.00
Street pavements taken up and relaid, asphalt.........	1,000 sq. yds.	3.50	4.35	3.00	3.50	3.50	3.50	3.50
" " " square block...	4,500 "	.45	.75	.30	.50	.50	.65	1.00
" " " cobble stone...	1,000 "	.40	.70	.25	.60	.50	.70	.50
" " " gravel..........	7,900 "	.50	.42	.80	.75	.50	.70	.50
" " " shell...........	11,700 "	.50	.35	.20	.50	.50	.60	.40
" " " plank..........	4,500 feet	.60	.25	.35	.20	.50	.80	1.00
Banquette " " Schillinger.....	1,000 sq. yds.	1.35	1.25	1.00	1.00	1.50	1.85	1.20
" " " brick...........	8,800 "	.60	.60	.50	.60	.60	.75	2.25
" " " flagging........	1,000 "	.60	.60	.28	.50	.75	.60	1.00
Foundation lumber under pipe sewers....................	12,000 ft. B. M.	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Sheeting and bracing left in trench....................	12,000 "	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Foundation material under sewers, cinders furnished and placed....................	250 cu. yds.	2.00	3.00	1.40	2.00	2.00	1.65	2.00
Foundation material under sewers, oyster shells furnished and placed....................	50 "	2.25	1.50	2.40	2.50	2.50	2.00	2.00
Foundation material under sewers, sand furnished and placed....................	50 "	2.25	1.50	2.00	2.50	2.00	1.75	2.00
Foundation material under sewers, gravel furnished and placed....................	50 "	2.50	4.00	3.50	3.00	2.50	2.00	2.00
Old curbing removed and reset	400 lin. ft.	.40	.20	.25	.20	.50	.35	.25
Bench mark furnished and set....................	6	20 00	10.00	10.00	17.50	12.00	25.00	20.00
Totals....................		$189,293	$193,046	$195,365	$203,412	$215,506	$230,018	Informal

WATER MAIN LAYING.—New Orleans, La.—Bids were received April 25 by Sewerage and Water Board, Geo. G. Earl, Gen. Supt., on work under Contracts 4 W and 5 W, calling for the laying of water mains; the contract for both sections was let to WEATHERFORD & CARY BROS., Memphis, Tenn., for a total of $180,636. The itemized bids received on Contract 5 W were as follows; (1) Weatherford & Cary Bros.; (2) A. L. Patterson & Co. Macon, Ga.; (3) Irwin Bros., New Orleans, La.; (4) Southern Construction Co., Macon, Ga.; (5) McGovern Construction Co., Trenton, N. J.; (6) Robert C. Storrie, New Orleans, La.; (7) T. J. Shea, New Orleans, La.:

Bids received at New Orleans, La., April 25, 1905, by the Sewerage and Water Board of New Orleans, Geo. G. Earl, Gen. Supt., on Work Under Contracts 4 W and 5 W, Calling for the Laying of Water Mains.

Items.	Quantity.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Unloading pipe and specials from cars, etc.............	5,000 tons	.50	.18	.30	.20	.50	.60	.33
" " etc., and piling in yard....................	500 "	.30	.15	.30	.30	.50	1.00	.50
Loading from yard, etc....................	500 "	.50	.18	.30	.25	.50	.70	.50
Each 100 ft. of haul from point of loading, etc.........	310,000 tons 100 ft.	.01	.02	.02	.01	.01	.02	.02 1/10
Laying all 30-in. water pipe....................	5,200 lin. ft.	1.30	1.30	1.40	1.75	2.00	1.75	2.15
" 24-in. "	12,000 "	1.10	1.10	1.15	1.25	1.25	1.20	1 90
" 20-in. "	36,700 "	.90	.87	.85	1.00	1.00	1.00	1.15
" 16-in. "	8,100 "	.68	.70	.60	.75	.75	.80	.80
" 12-in. "	1,200 "	.55	.58	.45	.60	.70	.65	.85
" 10-in. "	1,600 "	.50	.50	.38	.50	.60	.55	.59
" 8-in. "	1,600 "	.40	.35	.35	.40	.50	.45	.45
" 6-in. "	1,600 "	.35	.30	.30	.35	.40	.40	.36
" 4-in. "	2,600 "	.30	.25	.25	.30	.35	.35	.23
Furnishing on ditch each 30-in. valve....................	5	360.00	295.00	380.00	240.00	300.00	400.00	256.00
" " 24-in. "	7	204.00	170.00	210.00	140.00	170.00	190.00	152.00
" " 20-in. "	35	120.00	110.00	130.00	96.00	110.00	120.00	109.00
" " 16-in. "	4	70.00	70.00	75.00	52.00	60.00	75.00	61.00
" " 12-in. "	4	38.00	39.00	40.00	27.00	32.00	34.00	32.00
" " 10-in. "	1	26.00	30.00	30.00	20.00	22.00	27.00	24.00
" " 8-in. "	1	20.00	20.00	22.00	13.50	17.00	20 00	15.00
" " 6-in. "	40	13.25	10.00	15.00	7.00	11.00	15 00	9.00
" " 4-in. "	4	8.50	8.00	9.50	4.50	7.00	10.00	6.00
" " 4-in. hydrants, with 2¼-in. nozzle.............	20	26.00	27.00	24.00	22.50	22.00	35.00	26.00
" " 4-in. hydrants, with 2-in. nozzle.............	10	29.00	30.00	28.00	24.75	25.00	38.00	29.00
" " 5-in. hydrants, with 2-2½-in. nozzle, etc......	10	37.50	39.00	36.00	32.00	32.00	47.00	37.00
Setting all hydrants and furnishing concrete base, etc.	40	3.00	5.00	5.50	1.20	10.00	6.00	7.00
Furnishing each 4-in. "Rapp" screw plug..............	10	1.20	1.05	.85	.90	1.00	2.00	2.00
" 6-in. " "	10	[illegible]	1.50	1.40	1.25	1.50	3.00	2,50
" 8-in. " "	10	2.25	2.20	2.00	1.75	2.00	4.00	3.00
" 10-in. " "	10	.01	.01	....	....	4.00	1.00	5.00
" 12-in. " "	70	.01	.01	....	....	6.00	1.00	7.00
Furnishing all C. I. valve boxes, C. I. M. H. covers and frame....................	24,000 lbs.	.04	.03	.02½	.03	.02	.03	.03½
Lumber in place required by engineer under pipe, etc.	5,000 ft. B. M.	22.00	30.00	30,00	25.00	20.00	30.00	30.00
Blocks and wedges....................	10,000 "	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Round piling in place....................	200 lin. ft.	.75	2.50	.75	2.50	1.00	1.00	.60
Creosoted piling in place....................	200 "	1.00	3.25	1.00	3.75	1.50	1.50	1.00
Extra excavation....................	300 cu. yds.	.50	2.00	1.25	.80	1.00	1.00	1.50
Brick masonry....................	200 "	12.00	17.50	10.00	17.00	10.00	12.00	15.00
Concrete masonry....................	200 "	10.00	15.00	10.00	8.75	6.00	12.00	15.00
4-in. vitrified clay drain tile, in place....................	700 lin. ft.	.15	.50	.20	.25	.50	.60	.50
Street pavements, taken up and relaid, asphalt........	750 sq. yds.	3.50	4.00	4.00	4.00	3.50	3.50	4.00
" " " " Belgian block.	10 "	2.00	2.50	2.00	2.50	3.00	1.25	2.00
" " " " vitrified brick.	650 "	2.00	2.75	2.50	2.50	2.00	2.00	2.00
" " " " square block..	1,200 "	.75	.65	.75	.63	1.00	1.00	.75
" " " " cobble stone..	1,700 "	.60	.60	.75	.56	.50	1.00	.75
" " " " gravel.........	850 "	.60	.45	.70	.50	.50	.60	.80
" " " " shell.....	50 "	.60	.45	[illegible]	.38	.50	.60	.75
" " " " plank.........	600 lin. ft.	.50	.20	.40	.20	1.00	.25	.40
Sidewalk " " " Schillinger....	10 sq. yds.	2.00	1.40	1.00	1.25	1.50	2.25	2.00
" " " " flagging.......	10 "	1.50	.70	[illegible]	.65	1.00	.75	.50
" " " " brick..........	10 "	1.00	[illegible]	.70	.25	1.00	.50	.50
Old curbing removed and reset....................	100 lin. ft.	1.00	.25	.40	.25	.50	.25	.30
Steel beams channels, etc., bolted and riveted in place	10 tons	100.00	75.00	120.00	100.00	80.00	150.00	100.00
Corrugated steel bars, in place....................	100 lbs.	.10	.05	.07	.06	.10	.05	.05
Laying all 20-in. flexible joint pipe....................	300 lin. ft.	4.00	10.00	17.00	5.00	10.00	15.00	9.00
Totals....................		$93,199	$97,688	$98,401	$99,476	$103,435	$112,055	$126,410

SEWER SYSTEM.—Idaho Falls, Idaho.—Bids were received May 12 by the Sewer Committee for constructing pipe sewer system for this city, the contract being let to HANLEY & RITCHIE, Topeka, Kan., at the following bid; the price bid per lin. ft. does not include excavation: Louis C. Kelsey, Salt Lake City, is Engr.: 9,910 cu. yds. earth excavation, $.539; 1,810 cu. yds. rock excavation, $3.69; 5 cu. yds. concrete, $10; 25 sq. yds. cement plaster, $.30; 36 manholes, $50.60; 8 flush tanks, $80; 7,405 ft. 8-in. pipe sewer, 38½ cts.; 1,860 ft. 10-in. sewer, 49½ cts.; 811 ft. 12-in. sewer, 55 cts.; 1,493 ft. 15-in. sewer, 94 cts.; 2,035 ft. 18-in. sewer, $1.37; 410 cu. yds. excavation and backfill—gravel and boulders, $1.10; furnishing and laying Y's: 320 8-in. × 6-in., $1.02; 84 10-in. × 6-in., $1.37; 28 12-in. × 6-in., $1.92; 40 15-in. × 6-in., $3; 5$ 18-in. × 6-in., $4.50; additional depth of manholes over 10 ft., $3.30.

*PIPE AND CASTINGS.—Cleveland, O.—Bids were received by Board Public Service May 16 for furnishing 2 tons 3-in., 3 tons 4-in., 700 tons 6-in. and 8-in., 465 tons 10-in. and 12-in., 1,700 tons 16-in. and 18-in., 450 tons 24-in. and 36-in. pipe, and 150 tons special castings, 3-in. to 12-in., inclusive; 50 tons 16-in., 5 tons 24-in., 5 tons 30-in., 20 tons 36-in., 10 tons 48-in., the bids received being as follows: Massillon Iron & Steel Co., Massillon, O., offered to furnish 3-in. pipe for $28.75 f. o. b. cars, or $29.50 on streets, the 4-in. pipe for $26.75 f. o. b. cars, or $27.50 on streets, and for the remainder of the pipe a bid of $25.75 f. o. b. cars, or $26.50 on streets was made. For the special castings for all sizes from 3-in. to 30-in. the above firm bid $60.75 f. o. b. cars, or $61.50 on streets. For sizes from 36-in. to 48-in., inclusive, a bid of $70.75 f. o. b. cars, or $71.50 on streets, was made. The Camden Iron Works, Camden, N. J., bid $29.00 f. o. b. cars for all sizes of pipe save 10-in. and 12-in., and 24-in. and 36-in., offering to furnish the former two for $29.10 and latter for $27.90, both f. o. b. cars. For special castings 3-in. to 12-in, inclusive, and 16-in., the firm bid $56 f. o. b. cars, and for 24-in. and 36-in. castings made a bid of $60. The U. S. Cast-Iron Pipe & Foundry Co., Chicago, Ill., offered to furnish all pipe on streets for $25.20 per ton, and offered to furnish 3-in. to 12-in. special castings on streets for $55; for all other castings their bid was $64.

CIVIL SERVICE EXAMINATIONS.

GOVERNMENT EMPLOYEES.—U. S. Civil Service Commission, Washington, D. C., from whom further information can be obtained, has announced the following examinations: Artist draftsman, $1,200 per year, June 7; cable foreman, $75 to $90 per month, June 7; laboratory assistant, National Bureau of Standards, $900 per year, June 7; aid, Coast and Geodetic Survey, $75 per month, June 14-15; lineman for service on the Isthmus of Panama under Isthmian Canal Commission, $100 per month, June 14; superintendent, supervisor, foreman and trackman, for service on the Isthmus of Panama, June 14; aid and laboratory apprentice, Bureau of Standards, Department of Commerce and Labor, $480 to $600 per annum, June 21.

ASSISTANT ENGINEER.—New York Municipal Civil Service Commission, Henry Berlinger, Secy., 61 Elm St., New York, will hold an examination for the position of assistant engineer, Rapid Transit, at $1,200 per year. Applications will be received by the Commission until 4 p. m., May 31.

ARCHITECTURAL DRAFTSMAN.—New York Municipal Civil Service Commission, Henry Berlinger, Secy., 61 Elm St., New York, will hold an examination June 9 for the position of architectural draftsman, at $1,200 per year. Applications will be received by the Commission until 4 p. m., June 2.

INDUSTRIAL NOTES.

SMITH & ROBINSON, Contractors, 17 State St., New York, have filed petitions in bankruptcy, according to local reports.

THE AMERICAN [illegible] AGENCY, Ponce, Porto Rico, has been opened by L. P. Doz'a to do a commission business.

THE J. H. LINDSAY LUMBER CO., Pittsburg, Pa., has moved its offices to the Diamond Bank Bldg., Fifth and Liberty Aves.

COOPER & EVANS, engineers and contractors, have moved their office from 1043 Bergen St., Brooklyn, to 220 Broadway, New York.

THE CONTRACTORS' EQUIPMENT CO., Philadelphia, Pa., announces that it has removed its office from the Betz Building to 2126 Land Title Building.

THE MIRACLE PRESSED STONE CO., Minneapolis, Minn., announces that it has added to its business that of making cement tile, etc.

THE UNITED ENGINEERING & CONTRACTING CO., New York, announces that it has removed its offices from the Park Row Building to 32 East 33d St.

THE TAYLOR IRON & STEEL CO. has removed its offices from 253 Broadway to Room 86, 1 Broadway, New York. Volney W. Mason is the Engineer.

THE GREEN FUEL ECONOMIZER CO., Matteawan, N. Y., announces that it is prepared to execute orders for steel plate fans, blowers, exhausters, heaters, etc.

D. CUOZZO & BRO., 150 Nassau St., N. Y., announce that the firm has been dissolved, and that Geo. Cuozzo is no longer connected with the company.

THE SANITARY ENGINEERING CO., 237 Broadway, N. Y., announces that it has purchased the business of the Municipal Engineering Co., of Delaware, including uncompleted contracts, patents, designs and good will. Its specialties are the design and construction of refuse crematories and sewage purification plants.

G. M. GEST, subway contractor of New York and Cincinnati, has been awarded the contract to construct a complete underground conduit system for the Consolidated Electric Light Co., of Maine, at Portland, Me.

WILLIAM E. QUIMBY, INC. (Quimby Screw Pumps), and Sundh Electric Co., announce that they have removed their offices from 141 Broadway, New York, to 44-60 East 23d St.

THE ABENDROTH & ROOT MFG. CO. (Alan F. McIntyre, Western Manager), makers of spiral pipe, water tube boilers, etc., has moved into its new offices, 410 Monadnock Blk., Chicago.

WM. B. SCAIFE & SONS CO., Pittsburg, Pa., has designed and erected a mill building 172 by 78 ft. of steel frame construction and covered with corrugated iron, for the Broomall Iron & Steel Co., Belington, W. Va.

LYNCHBURG FOUNDRY CO., Lynchburg, Va., has purchased the Rudford Pipe Works, and will operate them in connection with its own plant after June 10. The combined capacity of the two plants will be about 50,000 tons of cast iron pipe per annum.

THE WALTER A. ZELNICKER SUPPLY CO., St. Louis, Mo., is now making a specialty of light rails cut to length for the use of contractors, builders, etc. Company carries large quantities in stock at its East St. Louis rail yards.

THE LOCOMOTIVE APPLIANCE CO., manufacturing the Allfree-Hubbell valve gear for locomotives, also derailers, wrecking frogs and other appliances, has removed its main office from St. Louis to the Old Colony Building, Chicago.

THE WESTINGHOUSE MACHINE CO. has recently announced that in addition to the original New York, Boston, Pittsburg and Chicago offices, new branches have been established in Cincinnati, Denver, San Francisco, Charlotte, N. C., and Atlanta, Ga.

AMERICAN BAR-LOCK CO. has occupied its new factory and offices in Philadelphia. It has secured the property at 26th St. and Pennsylvania Ave., Philadelphia, Pa., where a factory with adjoining offices was erected, and which has been recently occupied by the company.

THE WM. B. SCAIFE & SONS CO., Pittsburg, Pa., states that contracts have been placed with it for a steel frame trestle to be erected at Bellefonte, Pa., for the American Lime & Stone Co.; also for a steel frame tipple about 400 ft. long for their Buffalo run plant.

BAUSCH, LOMB, SAEGMULLER CO., engineering instruments, announces its formation, to take over the business of Geo. N. Saegmuller, formerly of Washington, D. C. The entire business has been removed to the new plant of the Bausch & Lomb Optical Co. at Rochester, N. Y.

THE BELLEFONTAINE FOUNDRY & MACHINE CO., Bellefontaine, O., reports the sale of the following steam dredges recently: Three for shipment to Missouri; two for parties in Minnesota, and one for shipment to Indiana. Four of these machines are the special No. 5 dredge.

THE MASSILLON BRIDGE CO. announces that the plant, machinery and business of the Massillon Bridge Co. have been bought by the Toledo-Massillon Bridge Co., and business will be conducted under the new name. The stockholders in the new company include nearly all the stockholders of the old company. It is really a reorganization.

THE STANLEY ELECTRIC MFG. CO. and the General Incandescent Arc Light Co. have consolidated under the corporate title of the Stanley-G. I. Electric Mfg. Co. The officers are as follows: Wm. Murray Crane, President; C. C. Chesney, First Vice-President; M. D. Barr, Second Vice-President; M. J. Insull, Third Vice-President.

WORKING MARBLE PLANT.—Hungary.—Dr. F. D. Chester, U. S. Consul-Gen., Budapest, writes us that Count Stephen Keglevich, 7, Kerepesi ut, 10, Budapest, offers to American marble users the yellow onyx, white marble and black marble embedded in his hills at Rako, Abanj-Terna County, Hungary, or wishes to enter into a contract for the mining of the same.

THE INGERSOLL-SERGEANT DRILL CO., N. Y., has received an order from the Navy Department for a class "GC" air compressor, to be located at the Portsmouth Navy Yard. The compressor has compound steam cylinders, 19 and 35 ins. in diameter, compound air cylinders, 32¼ and 20¼ ins. in diameter and 24 in. stroke. Its capacity is 2,179 cu. ft. of free air per minute.

THE DRIGGS-SEABURY ORDNANCE CORPORATION, Sharon, Pa., has about completed its plant, consisting of a foundry building, 100 × 40 ft.; forge shop, 109 × 160 ft.; machine shop, 60 × 280 ft.; power house, 40 × 180 ft., and shell building, 60 × 250 ft.; all of steel frame construction. They were designed, manufactured and erected by Wm. B. Scaife & Sons Co., Pittsburg, Pa.

THE WILKES BARRE (PA.) GAS AND ELECTRIC CO. has placed an order with Allis-Chalmers Co., of Milwaukee, for one horizontal cross-compound Reynolds-Corliss condensing engine, with cylinders 22 and 40 ins. in diameter and 42 in. stroke, for direct connection to a 500 KW., 60 cycle, 2,300 volt, alternating current generator. It will be designed to run in parallel with a Vulcan engine already installed, which will be rebuilt by Allis-Chalmers Co.

IRONS & RUSSELL'S, Providence, R. I., boiler plant, consisting of two 130 HP. Babcock & Wilcox boilers, is equipped for forced draft, the bridge walls being hollow and built over the air duct. Blast gates are set in the bridge wall, and the rods for opening and closing them lead through the boiler fronts. A 70-in. fan, driven by a single-cylinder vertical engine, furnished by the B. F. Sturtevant Co., Boston, furnishes the air for the forced draft.

THE REPUBLIC IRON & STEEL CO., Youngstown, O., has placed an order with Allis-Chalmers Co. for one horizontal cross compound condensing Bessemer blowing engine. The high pressure cylinder will be 46 inches in diameter, the low pressure cylinder 88 ins. and the two air cylinders each of 76 in. effective diameter. The stroke is to be 60 ins. The engine will be capable of delivering 24,000 cu. ft. of free air per minute at a pressure of 28 pounds per square inch.

HARBINSON & WALKER REFRACTORIES CO., Pittsburg, have ordered for their plant at Hays, Pa., one heavy duty horizontal Reynolds Corliss belted engine, with cylinder 22 ins. in diameter and a 42-in. stroke. This engine is to be non-condensing and designed to operate at 75 revolutions per minute, with from 110 to 125 pounds gage pressure. It will be of practically the same construction as others previously purchased from the same company.

THE VULCAN IRON WORKS CO., of Toledo, O., has just shipped three more "Little Giant" steam shovels to South Africa. It is understood that the Vulcan company has in the past shipped quite a number of this type of shovel into the diamond fields in the Kimberly District. Five "Little Giant" shovels are at work in close proximity to the mine where the largest diamond ever discovered was recently found, and the three shovels just shipped go on to this property.

KOHLER BROS., of Chicago, through their Pacific Coast Branch, the Abner Doble Co., of San Francisco, have recently installed their system on a new press of the Portland Oregonian, Portland, and have closed contracts with the Times-Mirror Co., Los Angeles, and the Spokesman-Review, of Spokane. The Kohler System consists of a multiple push-button control for the electrical operation for printing presses and other machinery. The Oregonian has a 50-HP. equipment.

THE DAYTON PNEUMATIC TOOL CO.'S new plant at Dayton, O., is now in full operation. In addition to their regular line of "green" hammers, this company is building some special pneumatic riveters for one of the shipbuilding plants. This riveter has a piston 2 ins. in diameter by 9-in. stroke. The tool complete weighs about 50 pounds, and will drive 1½-in. rivets. Working parts, while larger in size, are the same throughout as the standard riveting hammers. The piston, which operates at a high speed, and vertical valve decrease the vibration.

TUOLUMNE ELECTRIC CO., of San Jose, Cal., has ordered from Allis-Chalmers Co. one 600-KW. alternating current generator, two 35-KW. generators and three 200-KW. transformers, to be installed on the Tuolumne River, where a new hydro-electric power plant is nearly completed. The current to be developed will be used both for lighting and power, principally in neighboring mines, and an extension to the present plant will probably be made later on. The installation is typical of similar power transmission plants, which are now so numerous on the Pacific Coast.

RAILWAY WORK, ETC. — Abyssinia, Africa.—Our correspondent writes us as follows regarding work in Abyssinia: It is proposed to form an international company for the Djibouti-Addis-Ababa Ry., now being built. An English company is building a line from Berberah to the Abyssinian frontier, which will make a link in the proposed Cape-to-Cairo Ry. near the Nile. H. Jaune, C. E., of Harrar, Abyssinia, has discovered a metal deposit, which it is intended to develop. Dr. Vitalien has secured a concession from King Menelik to supply water to Harrar.

THE THOMAS MOLDING CO., of Chicago, has ordered for its new brick manufactory at New Straitsville, O., a Reynolds-Corliss horizontal, non-condensing, girder frame engine, 22 × 42 ins., with one 72-in. × 18-ft. horizontal tubular boiler designed for 125 lbs. working pressure; one 150-HP. open heater, and one 6 × 4 × 6-in. duplex boiler feed pump, piston pattern. Allis-Chalmers Co. will supply the machinery. The type of engine to be furnished is one adapted to all ordinary manufacturing purposes, where the steam pressure usually does not exceed 100 lbs.

THE NEWCASTLE PORTLAND CEMENT CO., Newcastle, Pa., has placed an order with the Westinghouse Electric & Mfg. Co. for two 175 KW., three phase, alternating-current generators, two 42 KW. exciters, etc. These machines will supply current for operating a number of type C induction motors, ranging from 10 to 100 HP. each, which were also included in the contract. The Western Engineering & Construction Co., through the San Francisco office of the W. E. & M. Co., ordered 180 HP. in type F, variable speed, induction motors; 130 HP. in type C, constant speed induction motors, and four O. D. transformers.

ALLIS-CHALMERS CO., Milwaukee, reports that Sears, Roebuck & Co., Chicago, have ordered the following apparatus: Three 24 and 50 × 48 and one 20 and 40 × 42 heavy duty cross compound Reynolds-Corliss engines; three 750 KW., one 500, one 100, and one 50 240 volt multipolar compound wound engine type generators. Each engine is designed for direct connection to its respective generator, and a total of 3,500 HP. will be developed. The installation will furnish current for use in their store at Harvard and Homan Aves., Chicago, and will be made from plans drawn by Adams & Schwab, Consulting Engineers.

THE WM. T. BONNER CO., 244 Summer St., Boston, has been incorporated to manufacture and sell a line of cushion pressure seated control cocks, blow off and other valves, of 4 in. up, invented by Mr. Bonner. The active management of the business will be in the hands of Wm. T. Bonner, M. A. S. M. E., Ass. A. S. N. E. (formerly general manager in Canada for Babcock & Wilcox, Lim.), President and Engineer; Lewis H. Homer (late with R. L. Day & Co., bankers, Boston), Treasurer and Secretary; P. A. Jerguson (late Asst. Master Mechanic U. S. Navy Yard, Boston), Superintendent; John R. Marvin, M. E., M. I. T. 1902 (late engineer and draughtsman with B. F. Sturtevant Co.), Asst. Engineer.

THE CANADIAN WESTINGHOUSE CO., LIMITED, recently sold to the Edmonton (Alberta) Street Ry. Co. a 200-KW. railway generator and a number of double equipments of railway motors. Edmonton is the most northerly point on the American continent to operate an electric railway. Another recent sale made by the Canadian Westinghouse Co. was that of a 500-KW. enclosed type turbo-generator unit to the Canadian Pacific Ry. Co. This unit is to be installed at Fort William, on the Canadian Pacific, and to be used for supplying power to the various grain elevators at that point. The unit is to operate 3-phase, 600-volt, 7,200 alternations, 3,600 r. p. m.

THE MINERAL POINT ZINC CO., of Chicago, has ordered from Allis-Chalmers Co. the complete power equipment for its remodeled plant at Depue, Ill., consisting of two heavy-duty, Cross compound, Reynolds-Corliss engines, each with cylinders 21 and 42 ins. in diameter and a 48-in. stroke; two 500-KW. Bullock generators, to which the engines will be direct connected; one 100-KW. generator, and twenty-four motors ranging in size from 10 to 75-HP., with starters, rheostats, etc. The two power units are designed for operation at 90 r. p. m., the engines being especially constructed to meet that condition, but the smaller generator will develop a normal speed of 250 r. p. m.

THE AMERICAN ENGINEERING CO., Traction Terminal Bldg., Indianapolis, with a capital of $300,000, has been incorporated. In a prospectus, the company states that it will contract to build electric and steam railroads, elevators, mills, bridges, mining plants, sewers, steam heating, lighting plants, telephones, gas plants, etc. In the directorate are August M. Kuhn, Fletcher S. Hines, Amos K. Hollowell, C. N. Wilson, E. W. Barrows and E. V. Abbott, of Indianapolis; Walter R. Palm, of Cincinnati, and J. C. Ostrup and Arthur C. Neely, of New York. C. N. Wilson, formerly Gen. Mgr. of the Columbus, Greensburg & Richmond Traction Co., is to be President of the company; John C. Ostrup will be Chief Engineer; John A. Shafer, Superintendent of Construction, and Arthur C. Neely, Financial Agent.

MR. A. P. HEAD, the London representative of the Wellman-Seaver-Morgan Co., Cleveland, O., has just completed a tour around the world and has established the following sub-agencies for the company: Melbourne—Australian Metal Co. as Australasian agents; the branches of this concern are as follows: New Zealand—The Gilbert Machinery Co., Wellington; Queensland—James Stothert, Brisbane; N. Queensland—James Croker, Mackay; New So. Wales—W. R. Laidley, Sydney; So. Australia—James C. Fraser, Adelaide; W. Australia—A. E. Thomas, Koolgardie; Tasmania—Lindsay Tullock, Launceton. In India the following agents representing the Presidencies of Bombay, Bengal and Madras, have been appointed: J. Harper, Calcutta; Frank Harrison, Bombay; W. H. Oakes, Madras.

THE BUFFALO POLE LINE CONSTRUCTION CO., Ellicott Square Bldg., Buffalo, N. Y., has been incorporated with a capital of $10,000, for the purpose of continuing the general contracting business formerly carried on by Johnson & Saunders, of Buffalo, and as the name implies, will specialize in any kind of pole work—telephone, telegraph, electric light, power transmission or trolley, or any of the accompanying works, such as power plants, switching stations, transformer stations, electric railroads—track, roadbed and equipment, in addition to the overhead work, and will install complete, any of the combinations which make up a complete unit where the transmission or consumption of electrical energy is an issue. Officers are: C. S. Saunders, Pres.; Wm. E. Robertson, Vice-Pres., and R. D. Johnson, Secy. and Treas.

THE LAWRENCE PUMP & ENGINE CO., of Lawrence, Mass., has just shipped ten of their improved "Vortex" centrifugal pumps to the Kimberly & Clark Co., of Kimberly, Wis. Four of these are directly connected to electric motors, the larger one having a capacity of 3 million gallons per day and to be operated by a motor of 75 HP. They also report having closed a contract for all of the centrifugal pumps to be used in the new mill of the Bryant Paper Co., of Kalamazoo, Mich. Other shipments include a 6-inch pump and engine to the Allentown Rolling Mills, Allentown, Pa.; a 12-inch high pressure "Vortex" centrifugal pump to the International Paper Co. at Corinth, N. Y.; a 5-inch bronze fitted pump to the Standard Oil Co., Jersey City. A new catalogue EA describing the Vortex pumps is now ready for distribution.

THE ABNER DOBLE CO., of San Francisco, announces that arrangements have been made with the John McDougall Caledonian Iron Works, Ltd., of Montreal, Can., whereby the latter become sole licensees for the manufacture of the Doble system of water wheels in Canada. The McDougall company have extensive machine shops, their plant including machine shops, pattern shop, foundry, forging works and structural material shop. They already have in hand the building of a 100-HP. wheel to operate under 170 ft. head taking water through a 3¼-in. jet and having a speed of 130 revolutions per minute. The Canadian licensees are prepared to furnish the steel pipe, structural work and all machinery necessary for complete power plants, and the Doble company requests that all engineers or parties interested in water power developments in Canada address the McDougall company direct. They have retained the Doble company as their consulting engineers.

THE AGRICULTURAL EXPERTS ASSOCIATION has been incorporated in New York by Geo. T. Powell, Thos. Tryon and Cyrus C. Miller, for the purpose of giving advice in all matters concerning land development in any direction. It will lay out an estate or a town or a group of farm buildings. It will examine soil and give advice as to the best methods of improving and cultivating it. Orchards, forestry, horticultural work and gardening and farming in all branches come within the scope of the A[illegible]ciation. Geo. T. Powell is Pres. The A[illegible]ation's sanitary engineer is Wm. Paul G[illegible]rd, the architect is Thos. Tryon, who desi[illegible] the Educational Alliance Bldg., New Yo[illegible] the consulting engineer is Collins P[illegible] of New York University. M. V. Sli[illegible]d, of Cornell, is the entomologist of [illegible] Association, and Frank S. Peer, who buys [illegible] for Baltimore, is associated with the [illegible] organization as live-stock expert. A [illegible]ape gardener completes the Association[illegible]al staff.

MERCHANT & EVANS [illegible] 517 Arch St., Philadelphia, Pa., announ[illegible] it has purchased from Merchant & [illegible] Inc., all its property and assets, and a[illegible] all its debts and liabilities. Mr. Pow[illegible]ns—who was Vice-President for a num[illegible] years and President for the past y[illegible] Merchant & Co., Inc., has organized [illegible] controls and is President of the new co[illegible]. Merchant & Evans Co. will continu[illegible] manufacture and distribution of metals. [illegible] old organization and personnel rem[illegible] with the new company unchanged, and th[illegible] are manufacturers, importers and jobbe[illegible] tin and terne plates, sheet irons, brass an[illegible]pers, solders, Babbit and printing metals, [illegible] ventilators, Spanish tiles, domestic [illegible] foreign metals generally. Offices, wareho[illegible] and works: 517 Arch St., Philadelphia; [illegible] South Michigan St., Chicago. Offices a[illegible] warehouses: 245-7 Water St., New York; [illegible] Flushing Ave., Brooklyn; 232 St. Paul, [illegible]altimore; K. C. Life Bldg., Kansas City.

THE BALTIMORE & OHIO [illegible] R. CO. has just officially awarded contra[illegible] for the construction of 10,000 freight cars [illegible] cost about $12,000,000, as follows: The [illegible] Am. Car & Foundry Co., New York, 2,000 [illegible] hoppers, to be built at Berwick, Pa., a[illegible] refrigerator cars, to be built at Chicago. The Pressed Steel Car Co., Pittsburg, 1,000 steel hoppers, 1,000 steel twin gondolas; Western Steel Car & Foundry Co., Chicago, 1,000 box cars; S. Baltimore Steel Car & Foundry Co., Baltimore, 1,000 box cars; Standard Steel Car Co., Pittsburg, 1,500 steel gondolas, with wooden sides; The Cambria Steel Co., Johnstown, Pa., 2,000 twin gondolas; Rodgers Ballast Car Co., Detroit, 250 ballast cars. According to the contract these cars have to be delivered between September of this year and January, 1906, at which time they are all to be completed. The Baltimore & Ohio recently placed orders for 250 new locomotives, to cost about $4,000,000; so that the purchase of the new equipment aggregates $16,000,000, and is the largest single order for cars ever placed by any railroad company in this country.

THE CROCKER-WHEELER CO., electrical manufacturers, at Ampere, N. J., state that its employees have organized a beneficial association which has a number of novel features. Every employee who pays 10 cts. a week to the association will be entitled to $10 a week for 20 weeks, during incapacity through illness. If he dies, his family will receive $100. The payment of 20, 30 or 40 cts. a week entitles him to $15, $20 or $25, respectively, with death benefits of $150, $200 or $250. The plan went into effect April 3. The company has offered to contribute an amount equal to the dues paid to the association. Thus if $6,000 are paid yearly in dues, the income of the association will be $12,000. The company does not require representation in the association, which will be run entirely by the employees. The President of the Crocker-Wheeler Beneficial Association is James Moore, who has charge of one of the big planers in the main bay of the shops. The other officers are Chas. H. Brittain, Vice-Pres.; Geo. T. Owen, Financial Secy.; Fredk. Maines, Rec. Secy., and Wm. Lennox, Treas.

THE HECLA PORTLAND CEMENT & COAL CO.'S cement factory and coal mine are offered for sale at auction on June 7, at noon, by the Detroit Trust Co., of Detroit, Mich., who is the Receiver, as stated in another part of our paper. The lands include 160 acres near the mouth of Saginaw River, which is partly occupied by the cement plant, 1,040 acres of marl deposits in Ogemaw county, Mich., thoroughly examined and tested by competent engineers; and 2,600 acres approximately, in Alpena county, containing large deposits of lime rock suitable for the manufacture of cement. Besides these there are large tracts of other lands acquired for various purposes, which will be included in the sale. The leasehold interests consist of practically perpetual leases on 1,850 acres of coal fields, all tested and showing coal in minable quantities. One of these fields of about 800 acres is equipped with a complete and modern apparatus above as well as below ground, and the output has been used under the boilers and in the kilns by the cement company; and the buildings and general equipment of the cement plant at Bay City, which are mostly of concrete construction, the marl drying plant near the marl deposits and the mine are complete, and the electric equipment and machinery throughout are of the latest design. In addition to the plants proper there are boarding houses, cottages for the working men, and many other auxiliary buildings. The indebtedness of the Hecla company amounts to upwards of $800,000, and in order to take care of all the liabilities the Court has fixed an upset price of $950,000. The Hecla Portland Cement & Coal Co.'s books show a much larger investment. If a sale takes place and same is confirmed by the Court, the property will be turned over to the purchaser free and clear from all liens, incumbrances and claims. The Hecla company was in operation for approximately six months. Among the assets are about 26,000 bbls. of cement. The coal mine has not been fully developed, and its output was used at the cement plant for the purpose of generating steam and burning cement. There is also a slip alongside the cement storage house, wide and deep enough to admit large lake steamers. There are four railroads at Bay City—Michigan Central, Pere Marquette, Detroit & Mackinaw and the Grand Trunk. The output of the present plant is about 1,000 bbls. a day. The buildings are of sufficient size and arrangement to permit of an output of 2,000 bls. a day, after installing certain additional machinery. The main items of machinery in the cement plant are: Four 300 HP. Franklin boilers with induced

draft-system and condensing pump; one 1,300 HP. Reynolds-Corliss compound engine; one 750 HP. K.-W. generator and four 75 HP. K.-W. generators of Westinghouse make, together with a number of electric motors, forming a complete electrical equipment for the plant, six kilns and a number of grinding mills sufficient to take care of the output of the latter. Throughout the factory at Bay City there is installed a conveying system, handling the material automatically from the time it enters the mill until it is delivered into the cement stock house. At the marl drying plant there are large and well equipped buildings containing three 150 HP. Franklin water tube boilers with water purifying system attached, two 125 HP. Ideal engines, five rotary kilns, Vulcan make, two dredges, and a number of electric motors, storage bins, etc. The coal mine contains a complete equipment for mining and hoisting coal, and is connected by rail with the cement plant.

TRADE PUBLICATIONS.

CEMENT WORKERS' TOOLS AND SUPPLIES.—The Contractors' Tool Co., 704 Arch St., Philadelphia, Pa. 3¼ x 6¼ ins.; pp. 32.

Tools for use in making cement walks and gutters are illustrated and price-lists given.

ELECTRIC LAMPS.—Nernst Lamp Co., Pittsburg, Pa. Paper; 6½ x 7 ins.; pp. 12; illustrated.

The application of Nernst lamps to church lighting is discussed here. Several fine views of church interiors lighted by these lamps are reproduced.

INDUCTION WATTMETERS.—Ft. Wayne Electric Works, Ft. Wayne, Ind. Paper; 5 x 7¼ ins.; pp. 21; illustrated.

A reprint of a paper entitled "Notes on Induction Integrating Wattmeters and Their Use," by A. A. Serva, read before last year's convention of the Colorado Electric Light, Power and Railway Association.

TRANSMISSION ALTERNATORS.—Stanley Electric Mfg. Co., Pittsfield, Mass. Paper; 8 x 10½ ins.; pp. 16; illustrated.

This pamphlet contains a reprint of an article published in Engineering News of Oct. 27, 1904, which discusses the principal points to be observed in the design of generators for service in long distance transmission work.

ELECTRIC HEATERS.—Simplex Electric Heating Co., Cambridge, Mass. Paper; 5 x 8 ins.; pp. 82; illustrated.

All kinds of electric heaters are brought together in this catalogue. The tailor's goose, the curling iron, the cigar lighter, the electric broiler, the electric chafing dish and dozens of other devices are shown, described and illustrated.

ELECTRIC MOTORS.—Crocker-Wheeler Co., Ampere, N. J. Paper; 7½ x 10 ins.; pp. 12; illustrated.

Direct current motors of small and medium sizes are discussed here, with special reference to their greatly varied utilization. These machines are wound either as motors or generators, shunt, series or compound.

CONDENSERS.—Alberger Condenser Co., 95 Liberty St., New York. Paper; 6 x 9 ins.; pp. 28; illustrated.

Condensers, dry vacuum pumps (single or multiple-stage), cooling towers and other machinery for high vacuum work, whether in power or evaporating service, are described here.

WATER-WHEEL GOVERNORS.—Lombard Governor Co., Ashland, Mass. Paper; 7 x 10 ins.; pp. 7; illustrated.

Type N Lombard governor is of the hydraulic type, the motive power being secured from oil under pressure in the tank. A hydraulic relay is used between the governor proper and the regulating mechanism.

PLANIMETERS.—John S. Bushnell Co., 126 Liberty St., New York. 4-page folder; 6 x 9 ins.

The Bushnell planimeter is a modification of the Coffin planimeter, and operates so as to give directly the mean effective pressure of an indicator diagram. A variety of scales is represented in the instrument.

STEAM BOILERS.—E. Keeler Co., Williamsport, Pa. Paper; 9 x 6 ins.; pp. 72; illustrated.

A complete catalogue of the Keeler water-tube boiler. Details are fully described, many views of plants are shown, and there is discussion of many matters, such as superheating, the use of inferior coals or refuse fuel, etc. Self-supporting steel stacks made by this company are also advertised.

FAN MOTORS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Paper; 3½ x 6 ins.; pp. 16; illustrated.

This is an artistic little advertisement of fan motors, including argument and description of special features. Alternating current motors alone are included.

CONCRETE BLOCK MACHINE.—Waterloo Concrete Brick & Block Co., Waterloo, Iowa. Paper; 6¼ x 3½ ins.; pp. 12; illustrated.

The company's molding machine is described, together with the finished product, including plain and ornamental blocks.

GRATES, BOILER FRONTS AND CASTINGS.—A. D. Granger Co., New York and Philadelphia. 9 x 6 ins.; pp. 23.

Vulcan shaking and dumping grates, boiler fronts and other castings are illustrated and described.

STEEL PLASTERING LATH.—Waukesha Expanded Metal Co., Waukesha, Wis. Paper; 3½ x 6 ins.; pp. 4.

This is a description and price-list of metal lath for buildings, giving fireproof construction and preventing cracks.

PUMPING ENGINES.—Luitwieler Pumping Engine Co., 707-715 North Main St., Los Angeles, Cal. Paper; 3½ x 6¼ ins.; pp. 12; illustrated.

Deep well pumps, pressure pumps, and other special pumping machinery are illustrated and briefly described.

TRACK SUPPLIES.—Buda Foundry & Mfg. Co., Railway Exchange, Chicago. Paper; 5½ x 8½ ins.; pp. 8; illustrated.

The supplies and appliances mentioned include hand cars, jacks and drills, sign and crossing gates, switches, frogs and switchstands.

AIR COMPRESSORS.—Sullivan Machinery Co., Railway Exchange, Chicago. 6 x 9 ins.; pp. 19.

The Sullivan straight-line two-stage air compressor is illustrated both by photographs and line drawings. The text explains the features of design and their merits.

WATER-WORKS SUPPLIES.—Water-Works Equipment Co., W. H. Van Winkle, General Manager, 180 Broadway, New York City. Paper; 6 x 3 ins.; pp. 4; illustrated.

The Star pipe jointer and accessories are described in one folder and a flanged sleeve and valve for tapping machines in another.

CENTRIFUGAL PUMPS.—Lawrence Pump & Engine Co., Lawrence, Mass. Paper; 6 x 3½ ins.; pp. 30; illustrated.

The "Vortex" centrifugal pump contains an open impeller fitted with vane plates on each side of the central web. It is built horizontal or vertical, separate or direct-coupled, and in many different arrangements and sizes.

PUMPS.—Luitwieler Pumping Engine Co., 707 North Main St., Los Angeles, Cal. Eastern Sales Agent, 450 National Life Building, Chicago. Paper; 3 x 6 ins.; pp. 12; illustrated.

A brief restatement of the claims for the Luitwieler steam pumping machinery is here made.

ROCK DRILLS.—The J. Geo. Leyner Engineering Works Co., Denver, Colo. Paper; 3¼ x 6¼ ins.; pp. 8; illustrated.

This pamphlet briefly describes the Leyner "Terrier" drill for rock work, which weighs only 54 lbs., and a hand drill for plug and feather work, block holing, etc. Both are operated by compressed air.

ROTARY SNOW PLOWS.—The Rotary Snow Plow Co., Paterson, N. J. Cloth; 5 x 7½ ins.; pp. 46; illustrated.

The first 20 pages of this pamphlet contain rules and general information in regard to the operation of the machine. This is followed by a general description of the rotary snow plow and its performance. There is a list of 33 railways using 67 plows.

DYNAMOS AND MOTORS.—C. & C. Electric Co., Garwood, N. J. Paper; 7½ x 10 ins.; pp. 16 and 20; illustrated.

In these two circulars two forms of direct current machine are described, which may be wound either as motors or generators. Full descriptions and dimensions are given, and there are remarks on the use of the machines for various classes of service.

CORLISS ENGINES.—The Corliss Engine Works, 40-41 North Fifth St., Philadelphia. Paper; 6 x 9 ins.; pp. 16; illustrated.

The Rickards Corliss engine is shown here, and numerous testimonials of its merits are quoted. A portable cylinder and valve seat boring machine is also shown.

FRICTION CLUTCHES.—Double Friction Coil Clutch Co., 42 River St., Chicago. Paper; 3¼ x 6 ins.; pp. 16; illustrated.

The clutch here shown makes a special claim of compactness and power. It contains a square steel bar coiled into helical form on the outside of a chilled iron drum. The grip between the coil and the drum furnishes the transmission.

WATER SOFTENING PLANTS.—Booth Water Softening Co., 126 Liberty St., New York City. Paper; 6 x 9 ins.; pp. 24; illustrated.

A compact railway plant all included in one large steel tank, and plants with two tanks and with three tanks are shown and described; also reagent bucket hoist and trolley, and automatic chemical feeds.

ASPHALT FILLERS FOR BRICK PAVEMENTS.—American Asphaltum & Rubber Co., Woman's Temple, Chicago. Paper; 6 x 9 ins.; pp. 20.

The claims for asphalt as compared with other fillers are stated, and in support of the claims citations from paving literature and testimonials are given.

MILLING MACHINES.—The Garvin Machine Co., New York and Philadelphia. 3¼ x 6 ins.; pp. 12.

The merits of the Garvin milling machines are briefly set forth and illustrated.

DUMPING WAGONS.—Moore Manufacturing Co., Syracuse, N. Y. 6 x 4½ ins.; pp. 15.

A bottom dump wagon of novel design, that also spreads the load, is illustrated in this catalogue. Prices are given and its particular features are described.

PORTABLE ELECTRIC TOOLS.—Cincinnati Electrical Tool Co., Cincinnati, O. Paper, 9 x 6 ins.; pp. 8; illustrated.

A portable direct-current motor drill and a direct-current portable grinder for use as a lathe tool are shown and illustrated here.

MILLING MACHINES.—The Garvin Machine Co., New York. 3½ x 6 ins.; pp. 24.

This little catalogue consists almost entirely of illustrations of milling machines of different types.

ELECTRIC HOISTS.—General Pneumatic Tool Co., Montour Falls, N. Y. Card; 9 x 5½ ins.

Shepard electric hoists are briefly advertised on this card. They are intended to run on I-beam trolley-ways for which service they are made in a variety of forms.

ELECTRIC FANS.—Ft. Wayne Electric Works, Ft. Wayne, Ind. Paper; 4 x 9 ins.; pp. 16; illustrated.

A talk on the "Wood" fan motors is here clothed in a striking blue cover. A concluding argument is that the fan motor gives ten hours comfort for two cents.

PNEUMATIC TOOLS.—The Ingersoll-Sergeant Drill Co., New York. 6 x 9 ins.; pp. 63.

Riveting hammers, chipping hammers, piston drills, rotary drills, rivet forges, hose couplings, gasoline air compressors, are illustrated and described.

STEEL WHEELBARROWS, CARS AND TRUCKS.—Archer Iron Works, 36 La Salle St., Chicago, Ill. 6 x 8½ ins.; pp. 24.

Steel wheelbarrows, stone cars, ore cars, lumber carts and trucks are illustrated and described, dimensions and capacities being given.

BALL BEARINGS.—The Clark Ball-Bearing Co., 502 Flatiron Building, New York. 8¾ x 5¼ ins.; pp. 19.

Line drawings and accompanying text describe the construction of the Clark ball-bearing for cars, automobiles and other wheeled vehicles.

ELECTRIC BELLS AND FUSES.—Rolfe Electric Co., Rochester, N. Y. Paper; 3½ x 6 ins.; pp. 36; illustrated.

Some special electric bells and a fuse box are shown in the introductory pages of this pamphlet. Following this is a summary of laws of the electric current, conversion tables, wire tables, etc.

WOOD PRESERVER.—C. A. Mfg. Co., Austin, Tex. 3¼ x 5¾ ins.; pp. 24.

The wood preserver described in this catalogue is a heavy brown oil that is applied to the wood with a paint brush, or the timber may be immersed in a bath of the oil. Many letters of recommendation are given.

LUBRICATORS.—Comstock Engine Co., 49 Clymer St., Brooklyn, N. Y. 3½ x 6½ ins.; pp. 8.

The lubricators illustrated in this catalogue are designed for the purpose of feeding graphite onto the journal or shaft to be lubricated.

WHEELBARROWS.—John L. Kirk, 204 Furguson Building, Pittsburg, Pa. Illustrated folder; 6 x 3½ ins.; pp. 8.

A new style of wheelbarrow is illustrated in this folder. The bowl is essentially a huge scoop which is dumped forward over the wheel of the barrow, instead of sidewise. The wheel is supported by ball bearings.

BUILDINGS OF CONCRETE BLOCKS.—Miracle Pressed Stone Co., Minneapolis, Minn. Paper, oblong; 9½ x 6¼ ins.

This is a set of nearly a score of half-tone engravings of buildings built of Miracle concrete blocks; they include residences, small offices, stores, schoolhouses, factories, etc. There is no descriptive matter.

STREET DRAINAGE GOODS.—The Duplex Mfg. & Foundry Co., Cleveland, O. Illustrated folder; 3½ x 6¼ ins.; pp. 8.

Sewer inlets, basin covers, catchbasin traps, manhole lids, lamphole and monument covers, are illustrated in this folder. The duplex brick clamp for handling paving bricks and other bricks is also shown.

WATER METERS.—Neptune Meter Co., New York City. Stiff paper; 6 x 9 ins.; pp. 56; illustrated.

An unusually attractive catalogue has been produced to show the construction and merits of the Trident disk meter and the Trident-Crest current or inferential meter. The illustrations include half-tones and blue prints, or blue print effects. Registers and extension dials are shown.

GAS AND OIL ENGINES.—De La Vergne Machine Co., foot of East 138th St., New York. 6-page folder; 4 x 8½ ins.

Two or three views and a few words of text relating to gas engines make up this folder. The gas engines of this company are made in sizes up to 3,000 HP., mainly after German models.

SLAG LADLES AND CARS.—Wellman-Seaver-Morgan Co., Cleveland, O. Paper; 9 x 6 ins.; pp. 12; illustrated.

The Dewhurst ladle cars are built either side-dumping or end-dumping. The ladles are single iron castings, unlined. They are of special shape, to facilitate stripping the skull.

ELECTRIC FANS.—General Electric Co., Schenectady, N. Y. Paper; 5¼ x 7½ ins.; pp. 48; illustrated.

Most of this booklet deals with electric fans of the desk, bracket and ceiling types, alternating and direct current. A line of ventilating fans and separate small motors down to 1-15 HP. in size is also shown.

STEAM ENGINES.—Watertown Engine Co., Watertown, N. Y. Paper; 9 x 7 ins.; pp. 32; illustrated.

Watertown engines include vertical and horizontal high-speed automatic engines and large cross-compound Corliss engines, as well as all intermediate varieties. They are described and illustrated here in handsome form.

STEAM BOILERS.—Henry Vogt Machine Co., Louisville, Ky. Paper; 6 x 9 ins.; pp. 8; illustrated.

The boiler here shown has several banks of tubes inclined alternately one way and the other and running from front to rear. Each bank connects to a transverse drum of small diameter at either end, instead of employing formed headers.

LINE INSULATORS.—The Locke Insulator Mfg. Co., Victor, N. Y. Paper; 6 x 9 ins.; pp. 56; illustrated.

Line insulators, both glass and porcelain, in a large variety of styles and sizes are shown here. Especial range is exhibited in composite insulators. In each case dimensions, weight, voltage, sparking distance, etc., are given.

FIRE EXTINGUISHER.—The Otto Gas Engine Works, 316 Dearborn St., Chicago. 4-page folder; 5¼ x 8 ins.

Battel'e's dry chemical fire extinguisher contains a dry powder and carbonic acid gas. When turned upside down, the dry powder is projected out of a small nozzle at one end and may be directed at the fire like a stream of water.

GAS ENGINES AND PRODUCERS.—Weber Gas & Gasoline Engine Co., Kansas City, Mo. Paper; 11 x 7½ ins.; pp. 20; illustrated.

The Weber gas producer is of the suction type and is adapted for any fuel, though charcoal, coke or anthracite is preferred. The producer, as well as the engine, is quite fully described by drawings, views and text.

ROLLING MILL MACHINERY.—Mesta Machine Co., Pittsburg, Pa. Cloth; 12 x 9 ins.; pp. 128; illustrated.

Much of this substantial and well-made catalogue is an illustrated description of the works of the company. Following this, specimens of the company's products are shown, including steam engines, blowing engines, rolling mill engines, sheet and plate mills, molding machines, heavy lathes and the like.

MARINE OIL ENGINES.—August Mietz, 128 Mott St., New York. Paper; 6 x 9 ins.; pp. 32; illustrated.

The Mietz & Weiss oil engine is made in a special style for launch propulsion. In this style it has from one to four cylinders, up to 8 x 8 ins. in size, driving a propeller from 10 to 36 ins. in diameter. The pamphlet gives all necessary information in regard to these engines.

CENTRIFUGAL PUMPS.—De Laval Steam Turbine Co., Trenton, N. J. Paper; 6 x 9 ins.; pp. 48; illustrated.

The De Laval centrifugal pumps, made in several distinct designs to suit various purposes in the matter of lift, etc., are quite fully described here, and are shown in connection with electric motors as well as De Laval steam turbines. The well-known tests of Professors Denton and Kent of three De Laval pumps are reprinted.

MILLWRIGHTS' APPLIANCES. — R. R. Street & Co., Chicago. Paper; 6 x 8 ins.; illustrated.

The subjects included in this catalogue are pulleys, bearings, hangers, clutches, belts and sprocket chains, and various similar devices required in fitting a shop. In all cases dimensions and prices are given in brief catalogue form. The latter is all printed on separate sheets which are pinned together in a separate paper cover, so that subsequent additions or changes may be inserted without difficulty.

For other Proposal Advertisements see pages 35, 36, 37, 38, 39, 40, 41 of Advertisements and Construction News page 204.

MACADAM ROADS.

Sealed proposals for building the first section of the Allentown and New Egypt stone road 3 40-100 miles long, and running from Allentown to Davis station, in Upper Freehold township, will be received by the Board of Chosen Freeholders of the county of Monmouth, N. J., at the Court House, in Freehold, on Wednesday, June 14, 1905, at 12 o'clock noon, and then and there publicly opened and considered. Specifications and all information regarding said construction may be had by applying to Peter Forman, Engineer, Manalapan, N. J., or at the County Collector's office at the Court House, N. J., or of Joseph Holmes, Chairman of the Road Committee, Cream Ridge, N. J.

Each bidder must accompany his bid with a certified check for one thousand dollars, made payable to the Director of the Board, as a guarantee if said work is awarded to him he will enter into a contract with the said Board for the due and proper performance of the same, which contract must be executed, together with the bond of the successful bidder, within the term of thirty days from the time of awarding the contract, in the penal sum of at least the estimated cost of the road, with two or more sureties, freeholders, or a good and sufficient Surety or Trust Company, all to be first approved by the Director of the Board and conditioned for the proper performance of the work strictly according to the plans and specifications. The board of Freeholders reserves the right to reject any or all bids.

JOHN GUIRE, Director.

Dated May 24, 1905. 21-3t

MACADAM ROADS.

Sealed proposals for building the first section of the Freehold and Colts Neck macadam road 3 10-100 miles long, as designated upon the plans and specifications, will be received by the Board of Chosen Freeholders of the county of Monmouth, N. J., at the Court House, in Freehold, on Wednesday, June 14, 1905, at 12 o'clock, noon, and then and there publicly opened and considered. Specifications and all information regarding said construction may be obtained by applying to Peter Forman, Engineer, at his office, Manalapan, N. J., or at the County Collector's office at the Court House in Freehold, N. J., or of Frank E. Heyer or David Buck, of the Road Committee, Freehold, N. J. Each bidder must accompany his bid with a certified check for one thousand dollars, payable to the Director of the Board, as a guarantee if said work is awarded to him he will enter into a contract with the said Board for the due and proper performance of the same, which contract must be executed, together with the bond of the successful bidder, within the term of thirty days from the time of awarding the contract, in the penal sum of at least the estimated cost of the work, with two or more sureties—Freeholders or a good and sufficient surety or trust company, all to be first approved by the Director of the Board and conditioned for his faithful performance of the work strictly according to the plans and specifications. The Board of Freeholders reserves the right to reject any or all bids.

JOHN GUIRE, Director.

Dated May 24, 1905. 21-3t

CONCRETE STEEL BRIDGE.

Pontiac, Mich.

Sealed proposals will be received by the Council of the City of Pontiac, Mich., up to 7 o'clock p. m. Monday, June 5, 1905, on seven (7) concrete steel bridges, over Clinton River on West Lawrence St., Bagley and Union Sts., and Paddock St.

Bids will also be received on other bridges; plans and specifications being furnished by the bidder.

A certified check of one hundred (100) dollars must accompany bid for each bridge.

Plans and specifications can be seen at the City Clerk's or City Engineer's Office.

(Signed.)

JOSEPH H. THORPE, City Clerk.

WM. J. FISHER, City Engineer.

21-1t

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Baltimore, Md., until 12 o'clock M., June 19, 1905, and then opened, for furnishing materials and labor of all kinds necessary for the erection and delivery of a keeper's dwelling at Cape Lookout Light-Station, N. C., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to Col. W. A. Jones, Corps of Engineers, U. S. A., Engineer. 21-1t

BRICK PAVING.

Corning, N. Y.

Sealed proposals will be received until Thursday noon, June 15, 1905, by the Board of Public Works of the City of Corning, N. Y., for laying about 1,700 lineal ft. of brick pavement on East Market St. Proposals must be accompanied by a certified check for $250, payable to the City of Corning. Plans and specifications can be seen at the office of R. H. Canfield, Supt. of Public Works. The Board reserves the right to reject any or all bids, and to diminish or increase the amount of work to be done. Address proposals to Board of Public Works, Corning, N. Y. 21-2t

WATER-WORKS.

Vineland, N. J.

Sealed proposals will be received by the committee of the Board of Managers, at the office of C. H. Anderson, 705 Land Title & Trust Bldg., Philadelphia, Pa., until 11 o'clock a. m., June 7, 1905, for furnishing material and constructing a system of waterworks at the "Home for the Care and Training for Feeble Minded Women," at Vineland, N. J. Work will embrace furnishing four and six-inch cast iron pipe and special castings, fire hydrants, valves, 360,000-gallon steam pump, 100-ft. tower, 50,000-gallon water tank, drilling an artesian well, and furnishing fire hose, etc.

Plans and specifications will be on file and may be obtained from the Engineer.

All inquiries must be addressed to the Engineer.

The right is reserved to reject any or all bids, or to accept any that may prove advantageous to the said Home.

Committee:

GEO. B. THORN.

C. H. ANDERSON.

WALTER E. SEXTON, Engineer,

1910 Market St., Philadelphia, Pa. 21-2t

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 12 o'clock M., June 21, 1905, and then opened, for furnishing miscellaneous articles for the Light-House Establishment, for the fiscal year ending June 30, 1906, in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to Lieut.-Col. W. T. Rossell, Corps of Engineers, U. S. A., Engineer. 21-4t

PROPOSALS FOR THE CONSTRUCTION OF A TERRACE WALL.

Holyoke, Mass.

The Board of Park Commissioners of the City of Holyoke, Mass., will receive until 8 p. m. of Monday the 12th day of June, 1905, sealed bids for the construction of a concrete masonry terrace wall in accordance with specifications on file in the office of the Board.

Each bid must be accompanied by a certified check drawn upon a National Bank of the United States in the sum of two hundred ($200.00) dollars payable to the City of Holyoke.

The Board reserves the right to reject any or all bids or to accept any bid should the Board deem it for the best interests of the city so to do.

Board of Park Commissioners.

CHARLES E. MACKINTOSH, Chairman.

JAMES L. TIGHE, Engineer. 21-2t

CONCRETE DAM.

NOTICE TO CONTRACTORS.

Pursuant to an order of the Board of Regents of the State University of Iowa, the undersigned will receive at his office up to 12 o'clock noon of the 13th day of June, 1905, sealed bids for the construction of a concrete dam across the Iowa River, at Iowa City, Iowa.

Instructions to bidders, plans, and specifications may be obtained by intending bidders upon application.

W. J. McCHESNEY, Secretary,

Iowa City, Iowa, May, 1905. 21-2t

SEWERS.

Rockford, Ill.

Sealed proposals will be received until 11 o'clock A. M., June 6, 1905, at the office of the President of the Board of Local Improvements for constructing sewers on portions of Third Street, Sixth Street, Seventh Street, Ninth Avenue, Twelfth Street, Oakwood Avenue, Forest Avenue and South Main Street. Estimated cost, $7,000.00.

Plans and specifications are on file at the City Engineer's Office and will be furnished upon request.

EDWIN MAIN,

21-1t City Engineer.

PAVING.

Ann Arbor, Mich.

Sealed bids will be [illegible]ived at the City Clerk's Office, Ann A[illegible], Michigan, for the construction of 8[illegible] yds. Brick or Asphalt Block Paveme[illegible] North University Avenue and Ashley [illegible], this city, according to the plans a[illegible] specifications now in the City Engineer's [illegible]. A certified check of five hundred d[illegible] to accompany each proposal. Bids to [illegible] not later than 2 o'clock, Saturday after[illegible] June 3d, 1905.

The right is reserved t[illegible] any and all bids.

By order of the Board [illegible] Public Works.

ROSS [illegible]GER, Clerk.

Dated, Ann Arbor, Mich[illegible] May 18, 1905.

21-1t

PUMPING ENGINES, LAWRENCE AVENUE

Department of Public Works,

Chicago, May 19, 1905.

Sealed proposals will be received by the City of Chicago until 11 A. M., Tuesday, June 20, 1905, at Room 22[illegible], City Hall, for furnishing all labor and material required and for constructing and erecting complete on foundations to be furnished by said City, ready for operation at the Pumping Station located at Lawrence Avenue and Evanston Avenue in the City of Chicago, four (4) Centrifugal and Screw Pumping Engines, according to plans and specifications on file in the office of the Department of Public Works of said City, Room 220, City Hall.

Proposals must be made out upon blanks furnished at said office, and be addressed to said Department, indorsed "Proposals for Pumping Engines for Sewerage Pumping Station at Lawrence and Evanston Avenues," and be accompanied with ten thousand dollars in money or a certified check for the same amount on some responsible Bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party offering it shall furnish evidence satisfactory to the Commissioner of Public Works of his ability, and that he has the necessary facilities together with sufficient pecuniary resources to fulfill the conditions of the contract and specifications, provided such contract should be awarded to him.

Companies or firms bidding will give the individual names as well as the name of the firm with their address.

JOSEPH M. PATTERSON,

Commissioner of Public Works.

WM. L. O'CONNELL,

Deputy Commissioner. 21-4t

Mail Copy for Proposal Advertisements

and "TELEGRAPH US THE REST" *AT OUR EXPENSE*

OFTEN COPY AND ORDERS for proposal advertisements, to be inserted in ENGINEERING NEWS, arrive too late for insertion in the current week's issue, the last pages of which go to press WEDNESDAY NOON. To avoid the danger of advertisements being received too late, and having to wait a week for insertion, we suggest that the official in charge of sending instructions, mail us copy for the advertisement in advance of the board meeting, if possible. We shall hold this copy for further instructions, which may be telegraphed us at our expense, immediately after the meeting. The copy of the advertisement sent us should be left blank as to the hour and date when bids are to be opened, the amount of the security and check, and other items that cannot be determined in advance.

THE LAST PROPOSAL PAGES go to press Wednesday morning, so that copy for advertisements, or telegrams, received Wednesday noon will have immediate attention. Letters mailed from points east of the Mississippi River on Monday, will be received at this office on Wednesday. Mail from points beyond should be posted Thursday, Friday, or Saturday, according to the distance. If in doubt that copy will reach us in time, send us a draft of the advertisement and "TELEGRAPH US THE REST." Special delivery stamps can also be used to good advantage. Follow your telegram with definite instructions by letter.

ADVERTISE FOR BIDS IN ENGINEERING NEWS AS FAR IN ADVANCE as possible, and continue the advertisement until the day of opening bids. A number of municipalities do this with satisfactory results. Plans and specifications may be filed at our offices in New York and Chicago (Monadnock Block) for the benefit of intending bidders, and an addition will be made to your advertisement, stating this fact, FREE OF CHARGE to you.

COPY FOR OTHER ADVERTISEMENTS, often used by city, county and state officials, such as "Situations Open" (3 cents a word) and "For Sale" ($1.50 an inch) advertisements should reach us on Tuesday to insure insertion in the current week's issue. These small cards will always bring good results.

Address Letters and Telegrams to

ENGINEERING NEWS

220 Broadway, New York

SITUATIONS OPEN

WANTED.—By an old established manufacturing concern, several more draftsmen experienced in large and small hoisting engines for mining work. Address HOISTING ENGINES, P. O. Box 1065, Chicago, Ill. 21-1t

WANTED.—In industrial engineer's office, draftsman with experience on mill construction. None but competent men need apply. Address "A A 21," Engineering News. New York. 21-1t

WANTED.—Competent pile driver foreman, immediately; experienced with steam hammer in difficult material. KOSMOS ENGINEERING CO., 25 Adams St., Brooklyn, N. Y. 22-1t

Just Ready

FIFTH EDITION

Osborn's Tables of Moments of Inertia

182 Pages, Flexible Leather

Revised by

THE OSBORN ENGINEERING CO.

Price, $3 00

FOR SALE BY

ENGINEERING NEWS

220 Broadway, New York